

ROADMAP for teams



WHAT'S INSIDE

This guide introduces teams to the creative process and provides activities, tools and Instant Challenges for team meetings.



PROJECT-BASED LEARNING

Team Managers are introduced to project-based learning, which helps students acquire deeper knowledge for success in school, career and beyond.

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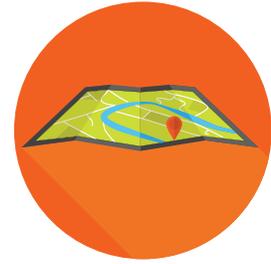
The PDF files for all the books in this set are available for download at Resources.DestinationImagination.org

ROADMAP

a guide for
informal learning



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BEFORE YOU BEGIN

Warning: Thinking is contagious! Learning is addictive! Be prepared for a life-altering experience! As a Team Manager, you are about to embark on an amazing opportunity to facilitate a great life-changing journey for a team of learners—and yourself! The journey is the most important aspect of Destination Imagination. Get ready to watch as your team's members step out of their comfort zones, learn from failure, and experience fits of laughter and brilliance as learning and growth occurs. A collaborative team will form and individuals will blossom! You will have the opportunity to be a front row spectator as that experience unfolds.

Stand back and allow Destination Imagination participants to own the experience by shaping the journey in their own way. You are there to help the team acquire the skills they lack. For example, team members may need help understanding a math concept or how to use a drill. Step up and help them learn those skills, but step aside and give your team members the opportunity to take full ownership of their Challenge solution. That ownership is a vital element of the Destination Imagination journey. It allows participants to learn lifelong lessons through experience, which will affect each participant in an individual, memorable and meaningful way. Allow team autonomy even as you introduce the team to evaluation and processing skills. The autonomous team's path on this journey may not be a straight one, but every twist and turn will be worth taking. Neither you nor the team members will be the same after just one season!

We are grateful for the time and effort that you are volunteering, and the children on your team will be forever thankful that you have given them the opportunity to learn and experience the creative process from imagination to innovation.

ABOUT ROADMAP

Roadmap is a guidebook to help you manage your team by providing plans for sixteen scheduled meetings. You are not required to use this resource; however, it is designed to help you teach the creative process to your team members. As a Team Manager, you are essentially the team's tour guide: you will facilitate, organize and position the team to develop skills that will shape their futures and set them on a path to becoming the next generation of innovators. In Roadmap, you will find suggestions, activities, and questions to better guide teams toward more focused planning and execution of a solution. The meeting plans have been developed to help a group progress from a newly formed team to a more experienced, refined team. Read each session ahead of time. We have included a to-do list at the beginning of each session, and a list of pages that need to be printed for each session. We have also included a full shopping list for all of the activities. Throughout Roadmap, look for Team Manager (TM) Tips for practical ideas that will connect you and the team with the program's learning outcomes.



Note taking as the team processes, reflects and evaluates can be a nice way document team growth. Throughout Roadmap are opportunities for documentation marked with a pencil icon as a reminder to take notes.

Roadmap only details some team sessions, and much of the team's progress will take place in additional meetings scheduled beyond the sixteen outlined in Roadmap. As you near the tournament, the team may need more frequent meetings with longer meeting times. Whether you utilize a preplanned session from Roadmap or follow a team-created plan, always prepare in advance for an upcoming team meeting to ensure that the team meets goals, effectively uses time, and focuses on team growth.

ROADMAP IS DIVIDED INTO TWO SECTIONS:

- Processes and Skills
- Plans and Ideas for Team Sessions

THE CREATIVE PROCESS

Our goal at Destination Imagination (DI) is to give students the chance to learn and experience the creative process from imagination to innovation. Team members who develop an understanding of the creative process can more effectively approach problems and take solutions to a more innovative level. Below are the components of the creative process that our participants experience while solving our Team Challenges and Instant Challenges. The process integrates Bloom's Taxonomy, the scientific method, 21st century skills, collaborative problem solving, the stages of practical inquiry, and whole child education.

Remember that the creative process isn't a straight and linear path, but one that is circular, often looping back from one stage to a previous stage or stages. In Instant Challenge, the process is condensed into a short time frame and must happen rapidly. At times, the process may feel "messy," but you can help your team move from one stage to another as they create their amazing and innovative solution.

STAGE ONE: RECOGNIZE

- Becoming aware of the team-chosen Challenge
- Working together as a team to gain a more in-depth understanding of the Challenge
- Identifying team members' interests and strengths

TM Tip: You will know when team members have an understanding of the Challenge when they can summarize it in their own words. Read an Instant Challenge aloud to the team while they read along silently and then ask them to summarize it to see whether they actually recognize the Challenge and what they are being asked to do.

STAGE TWO: IMAGINE

- Generating ideas with team members and listening to all ideas before judging them
- Focusing on promising ideas after generating many solution options

TM Tip: Encourage team members to elaborate on the ideas presented so that the whole team can fully understand them. Many great concepts are lost because some team members may not fully understand them. The team should keep a record of all ideas generated for future use during other stages of the process. Writing down the lists when generating and then snapping a photo with a cell phone is a convenient way to keep the documentation. There are also a number of digital platforms that can be used to create and keep lists.

STAGE THREE: INITIATE & COLLABORATE

- Researching, exploring and experimenting with ideas for the Challenge solution
- Defining goals and creating a project timeline
- Committing to options for the Challenge solution
- Working together to build and complete all requirements on time

TM Tip: Collaboration should be encouraged between all team members as well as with research items. The research could include online articles, websites and books. It could also involve interviews, field trips and experimentation with materials. Encourage the team to prototype, or create small-scale models of the components of its proposed solution, so that it doesn't have to spend large amounts of time and expense on full-scale experimental pieces.

STAGE FOUR: ASSESS

- Assessing the team's progress against the project timeline
- Realizing that an idea may need to be reworked or reimagined
- Practicing and preparing to present at a tournament

TM Tip: Assessing the team's progress can lead to better solutions. Remind the team members that there is nothing wrong with cycling back to the Imagine Stage to find better ideas as they assess their solution.

STAGE FIVE: EVALUATE & CELEBRATE

- Presenting at a local Destination Imagination tournament
- Reflecting on your team's experience and evaluating the results
- Celebrating what your team has learned and accomplished

TM Tip: Reflecting on the creative process at the end of an Instant Challenge is an excellent way to teach transferable skills to use with a Team Challenge. At the end of each Instant Challenge, talk about how the team progressed through the creative process and have the team evaluate the overall experience and solution. If each team member is still excited about the Challenge and wants to try it a second time, this indicates that a team member has truly arrived at the celebration stage and is validated in the creative process even if the team or a team member feels the solution is a failure.

THE IMPORTANCE OF THE TEAM MANAGER

Before you begin working with your team, it is very important to understand four essential things about managing a Destination Imagination team:

- Destination Imagination is a process-driven system of learning that is more than just preparing for a tournament. The program:
 - ★ uses inquiry-guided learning principles to foster creative and critical thinking
 - ★ encourages teamwork, collaboration and leadership skills
 - ★ teaches problem solving methods and tools
 - ★ honors and develops the individual interests, skills and abilities of all participants
- The Team Manager's role is to act as a facilitator throughout the process. Team Managers can encourage teams to overcome obstacles in their own way by asking lots of open-ended questions. For example, if a team member asks, "Why won't this gear turn properly?" the Team Manager might answer with, "What are some reasons you can think of that could be keeping it from turning properly?"
- Teamwork can be a tricky business. Every team follows its own progression as it learns to work together, and every step of the progression is necessary. Be aware that some of these steps include conflict and conflict resolution, which are often integral parts of a team's development.
- Learning can be fun and it is important to the team, so help the team members to see the educational strides they are making in learning.

TM Tip: Study the Process and Skills portion of Roadmap. Help your team members to recognize skills, stages or steps they are using within a process. Point out to the team members when you observe the stages occurring. Immediate feedback on the process can better help a team member to recognize and understand the different stages and skills. Reinforce the skills by posting signs of the terms at meetings and using the correct terminology as you talk to your team. However, don't overload the team with terms and bog them down with the processes. Be selective as you choose those that are appropriate for the age and ability of your team.

PROJECT-BASED LEARNING

The Destination Imagination program is built around the components of project-based learning (PBL). Team Managers should familiarize themselves with the components of PBL and look for ways to connect the Destination Imagination Challenges to college readiness, careers and lifelong learning.

WHAT ARE THE ELEMENTS OF PROJECT-BASED LEARNING?

LEARNER FOCUSED: The goal is to equip team members with the ability to recognize skills for working and operating in an ever-changing and diverse global community.

TM Tip: Listen as the team works and assist the team to focus as much on the process (collaboration, creative process, project management, and critical thinking) as on the solution. Younger teams are more drawn to the tactile than the abstract, so it may help to break the process down into more manageable pieces. Praise team members when you see them working effectively through the process.

A MEANINGFUL CHALLENGE: Team Challenges and Instant Challenges are opportunities for a team to work on multi-step and complex open-ended tasks.

TM Tip: Younger and novice teams may need to be shown how to break down Challenges into smaller components that can be solved more easily. Try using an Instant Challenge to help your team learn this skill.

REAL-WORLD CONTENT: “Real-world” refers to the life that exists around each team member: their interests, expectations, and concerns. Many of the tasks a team will undertake are defined by their experiences in life.

TM Tip: Create an environment that encourages them to explore and find answers to their questions. As you hear team members asking “what if” questions, encourage them to explore and answer them.

DEEP INQUIRY: Team members should be constantly asking thoughtful questions and seeking answers to those questions. Probing questions can lead to extended research, a deeper understanding of the findings and more effective application of the findings.

TM Tip: Record the interesting questions that team members ask and revisit them later to allow the team members to share their findings. Following up on team members’ questions gives them the opportunity to process their findings and share that information with each other.

OWNERSHIP: The team should make its own decisions about how and what they will create as the solution develops.

TM Tip: Keep a journal of the team’s progress, noting what decisions were made, who thought of an idea and who executed it. As the season progresses, this will instill confidence in the team members as they take ownership of the components of their solution.

REFLECTION: Reflection time helps to solidify learning and the application of knowledge.

TM Tip: Build in time for the team to reflect on and process the team meeting. Ask reflective processing questions after every Instant Challenge. At the end of each meeting, provide time for the team to reflect on what went well, what could be improved, what they enjoyed about the meeting, and what is left to be accomplished. Reflection at the end can help as the team plans for the next meeting, the next Instant Challenge session or even the next season. Remember, you provide the time and questions, but the team provides the reflection.

ASSESSMENT: There must be continuous assessment and feedback in order for the process and solution to be the best it can be.

TM Tip: The questions could be about the quality of workmanship, the level of innovation, and the scoring potential of what the team has created. Post the questions for the team members to refer to throughout the season, and encourage them to reference the questions and make assessments as they work on their solution.

AUDIENCE: Although a tournament provides an audience of Appraisers who are familiar with all aspects of the DI program, other opportunities to present to an audience should be provided.

TM Tip: Schedule times for the team to present Instant Challenges to a small audience that doesn't know anything about Destination Imagination. Encourage the audience to ask the team questions about its solution and the Challenge. Invite a small group of people to come to a few team meetings. Have the team members explain what they are creating and how they are developing their solution. However, be sure that the guests do not contribute to the team's solution by providing feedback or giving the team suggestions. Teams' solutions must consist entirely of their own ideas.

SKILLS FOR CREATIVE AND CRITICAL THINKING

CREATIVE THINKING

THE PROCESS OF DEVELOPING IDEAS AND OPTIONS TO SOLVE THE CHALLENGE

There are four goals for which your team should strive when it is creating ideas:

- **FLUENCY** is the ability to generate as many options as possible.

TM Tip: Continually ask open-ended questions and press for multiple answers to instill fluent thinking in team members.

- **FLEXIBILITY** is categorizing ideas and objects as well as learning from different categories (such as materials, functions or features) and thinking about them in diverse ways.

TM Tip: Provide a wide variety of common Instant Challenge materials and ask the team to demonstrate each of the materials as an extender, connector, and controller. Well-developed flexible thinking allows team members to see how items can cross over into multiple categories. (See Session 4 Activity 2.)

- **ORIGINALITY** is creating novel options that are often clever (such as an unusual combination of two objects or clever word play).

TM Tip: For an Instant Challenge, give the team a character and an unrelated setting and ask them to create a performance that successfully integrates the two. Example: An octopus living in the desert.

- **ELABORATION** is using words, images, and actions to enhance meaning.

TM Tip: As an exercise, ask the team members to think about how they might build a costume that effectively portrays an animal. Ask questions that search for details, such as: "What color is it?" "What materials should the costume be made out of?" "How does the character move?" Ask team members to build on other team member's ideas.

Learn to use idea generating tools. When you utilize idea generating tools, keep these basic guidelines in mind:

- Remain open. Nothing smothers the free flow of ideas like a sharp critical remark or harsh laughter from another person. To encourage the flow of ideas, make sure no judgmental attitudes are present that make a team member become more concerned with defending ideas rather than creating them. This also counts for self-judgment. Don't stifle your own ideas.
- State and document all ideas. It is easier to tone down an idea than to think one up. Encouraging wild or silly ideas encourages team members to be imaginative. Placing a premium on that which initially appears far out encourages team members to expand their thinking.
- Quantity counts. If there are a large number of ideas to be considered, the chance of finding a really good idea is greater.
- Hitchhike on the ideas of others. Creative people can learn to be good listeners. Most of us have built on others' ideas or been reminded of something upon hearing an idea from someone else.

CRITICAL THINKING

THE PROCESS OF EVALUATING AND SELECTING AN OPTION

Critical thinking involves objective analysis and evaluation of ideas and options. When the team has generated lots of ideas, it will need to begin to sort through them and decide which ideas merit a closer look. Idea focusing involves examining possibilities carefully, fairly and constructively. Teams should then focus their thoughts and actions by:

- Organizing and analyzing possibilities
- Refining and developing promising possibilities
- Ranking or prioritizing options
- Choosing or deciding on certain options and
- Using ideafocusing tools to aid in the option selection process

TM Tip: Help team members to be able to recognize the difference between objective and subjective reasoning. As team members evaluate different idea options, ask if their reasoning is objective or subjective. This will help the team differentiate between fact and opinion.

When you use idea-focusing tools, follow these basic guidelines:

- **Stay Positive.** Don't confuse criticism and critical thinking. Critical thinking should be focused toward guiding beliefs and actions, not just toward attacking ideas or pointing out what's wrong with them.
- **Be thoughtful.** Critical analysis is not a matter of settling on an idea or course of action as a matter of whim. Knowing and using strategies helps teams focus on options and goals, and also helps prevent conflict.
- **Consider uniqueness.** Focus your ideas into possibilities that provide new and better ways to proceed or move forward.
- **Stay on the path.** It is much easier to focus your critical thinking in productive ways if the goals and objectives are clear. Test progress by asking, "Are we moving closer toward where we want to be? Will these ideas help us move in a positive, constructive direction?"

21ST CENTURY LEARNING

Destination Imagination is committed to teaching 21st century skills through the DI program. Roadmap is a compilation of 21st century learning best practices. Throughout every stage of the creative process, teams will learn and apply 21st century skills in multiple ways. The creative process is a natural and easy way to foster collaboration, communication, creativity and critical thinking. Beyond the DI Program, the activities and skills highlighted in this resource can be used at any time to teach these skills. They will be key factors to success for today's learners as they prepare for college, careers and global citizenship.

The deep connection that DI has with this type of learning can also be seen in our relationship with the Partnership for 21st Century Learning (P21). As a member of the P21 Executive Council, DI has been an integral part of making 21st century learning attainable for anyone.

To learn more about the work that DI has been supporting through P21, please visit the links below. They will lead you to compelling research, conversations, podcasts and more.

FRAMEWORK FOR 21ST CENTURY LEARNING

The Partnership for 21st Century Learning has created a graphic that presents both teaching and learning through student outcomes and support systems. <http://www.p21.org/our-work/p21-framework>

PARTNERSHIP FOR 21ST CENTURY LEARNING BLOG CATEGORIES

There is a wealth of knowledge and information regarding a number of topics that are pertinent to Destination Imagination teams and Team Managers. Below are some links that contain blog posts about research, best practices, videos, podcasts and more from some of the most important and influential thought leaders in education today.

Citizenship

<http://www.p21.org/component/taxonomy/term/summary/45/358>

Collaboration

<http://www.p21.org/component/taxonomy/term/summary/46/358>

Communication

<http://www.p21.org/component/taxonomy/term/summary/47/358>

Creativity and Innovation

<http://www.p21.org/component/taxonomy/term/summary/48/358>

Critical Thinking

<http://www.p21.org/component/taxonomy/term/summary/142/358>

Early Childhood

<http://www.p21.org/component/taxonomy/term/summary/63/358>

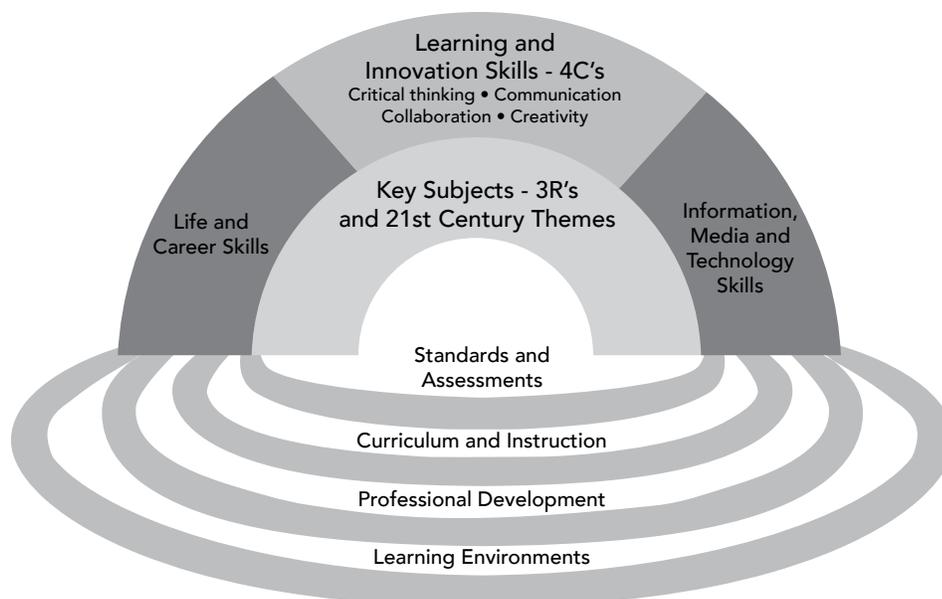
Self-Directed Learning

<http://www.p21.org/component/taxonomy/term/summary/60/358>

PROJECT MANAGEMENT

The world runs on projects and Destination Imagination Challenges can easily be described as “projects.” The Project Management Skills Map was created by the Project Management Institute Educational Foundation (PMIEF) and provides a connection between project management skills, 21st century skills and career pathways.

<http://pmief.org/learning-resources/learning-resources-library/21st-century-skills-map>



PROJECT MANAGEMENT STEPS

PMIEF has taken the standard project management language as developed by the Project Management Institute and converted it into more student-friendly terms. In this version, every project proceeds through a cycle comprised of four steps: Defining, Planning, Doing and Reviewing. A Destination Imagination Team Challenge is just like a project. Through DI, teams can learn how professionals tackle large-scale real-world problems through an educational lens. The project management cycle also closely aligns with the creative process that teams will follow when solving the different components of their chosen Team Challenge.

Defining: The first step of every project cycle is to define the project. If a DI Team Challenge is a project, then it can be broken down into a smaller number of mini-projects. Each Team Challenge has a number of requirements that need to be met for the team to solve the Challenge. It is important to first define and understand the entire Challenge and then break down the Challenge into the main component along with the supporting components. Defining the Challenge as a project allows the team to establish what needs to be solved, what the desired end result will be and how resources should be allocated to certain aspects of the solution. The team should all agree upon these important factors, or at least discuss them before any work begins on the solution. With DI Team Challenges, many of these essential questions are defined in the Challenge rules to help teams know where to start. During this step it will also be important for teams to define roles for each member. By defining team roles, each individual team member can more easily understand the task at hand and how they contribute effectively and efficiently to the Challenge solution. The Defining step is closely associated with the Recognize Stage of the creative process. For more on the Defining step, refer to Session 4, Activity 4.

Planning: The second step of the project cycle is to plan. Planning is an important step in developing your Team Challenge solution because the amount of time and energy dedicated to planning will correlate directly to how well your team stays on schedule and on budget, and how well the team meets the requirements of the Challenge. Roadmap helps the team by dividing the team's participation into 16 individual sessions. If the team remains dedicated and focused, it will be able to complete the Team Challenge solution in time for the tournament. The Planning step is closely associated with the Imagine Stage of the creative process. For more on the Planning step, refer to Session 4, Activity 4 and Session 7, Activity 4.

Doing: The third step of the project cycle is to do. It can feel exciting to jump ahead to "just do something," but executing a project works best if the appropriate amount of time has been allocated first to defining and planning. Careful planning, research and testing will make the Doing step easier. Since the DI program uniquely requires there to be teamwork and collaboration, the Doing step will be more effective if roles are defined and the work and project can be split up between team members who have specific skills, expertise or interest in certain areas of the Challenge. The Doing step is closely associated with the Initiate & Collaborate and Assess Stages of the creative process. For more on the Doing step, refer to Session 10, Activity 3.

Reviewing: The last step in every project is the review. This is the opportunity to focus on the quality of the project deliverables. For the DI program, the deliverable is the team's Presentation that will take place at a local tournament. It is the opportunity for the team to present its solution to a set of trained Appraisers who will validate the team's evaluation of the individual components of the Presentation. This is also an opportunity for the team to reflect on how they worked through the creative process by filling out the third page of the Tournament Data Form. The team can also review the stated possible learning outcomes at the beginning of each Team Challenge. The Reviewing step is closely associated with the Evaluate and Celebrate Stage of the creative process. For more on the Reviewing step, refer to Session 16, Activity 2.

For more educational resources that strengthen both teaching and learning, please visit the following links on the Project Management Institute Educational Foundation's website:

Careers in Project Management: <http://pmief.org/learning-resources/learning-resources-library/careers-in-project-management>

Project Management Skills for Life: <http://pmief.org/learning-resources/resources-for-youth/students/project-management-skills-for-life>

Project Management Toolkit for Teachers: <http://pmief.org/learning-resources/resources-for-youth/teachers/project-management-toolkit-for-teachers>

Project Management Toolkit for Youth: <http://pmief.org/learning-resources/resources-for-youth/parents/project-management-toolkit-for-youth>

21st Century Skills Map: <http://pmief.org/learning-resources/learning-resources-library/21st-century-skills-map>

CREATIVE PROCESS/PROJECT MANAGEMENT STEPS

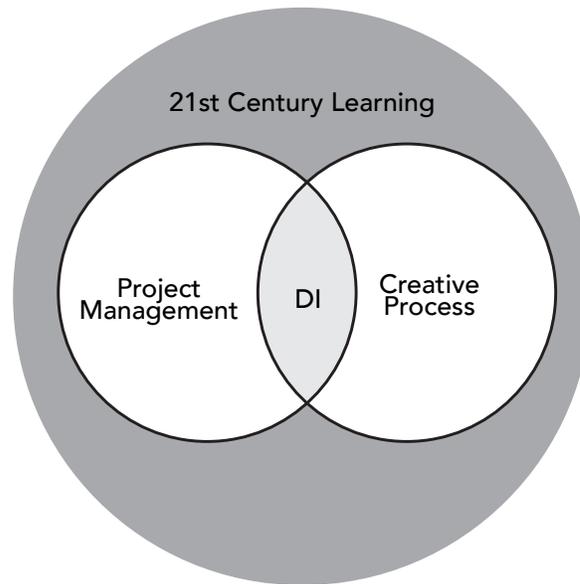
Because of the many components and the complexity of Team Challenges, Project Management Steps can be utilized as the team works through the Challenge solution. Below is a chart comparing the two processes.

Project Management Steps	Creative Process	Description
Defining	Recognize	Beginning a project; identifying the problem or challenge and agreeing to work together to solve it
Planning	Imagine	Generating ideas; defining goals and creating a project plan and timeline
Doing	Initiate & Collaborate Assess	Experimenting with potential solutions; completing the work defined in the project plan; working with others to complete the project; tracking progress on the project goals and timelines; ensuring that the products meet the requirements of the Challenge; identifying any areas of the project that need changing; practicing and preparing the solution for presentation
Reviewing	Evaluate & Celebrate	Finalizing the project plan; presenting a solution to an audience; reflecting on what was learned and what could have been done differently; celebrating the completion of the project

PROJECT MANAGEMENT

THE CREATIVE PROCESS, PROJECT MANAGEMENT AND 21ST CENTURY LEARNING

Through participation in the Destination Imagination program, teams will have the unique opportunity to develop their 21st century skills. When teams use the creative process and project management in tandem while solving their Team Challenge, the experience they have in the DI program will be more rich and meaningful.



GLOBAL COMPETENCY

The Destination Imagination program is a system of learning that encourages participating teams to explore and gain understanding of other cultures. Throughout the years, multiple Team and Instant Challenges have incorporated requirements that ask teams to further their cross-cultural knowledge. By motivating teams to learn about, respect and internalize cultural differences, Destination Imagination better equips its participants to become true global citizens. For global competency Challenges, please refer to: Session 11, Activity 3 and Session 16, Activity 1.

TEAM DEVELOPMENT

In 1965, educational psychologist Bruce Tuckman published a well-known and elegant framework for describing the stages of group development. This framework names the patterns of behavior we almost always observe when individuals form groups with interdependencies. First is the forming stage, followed by the storming, norming, performing and adjourning stages.

It's important to note that these stages overlap somewhat and teams can move back and forth as circumstances affect their development. Some teams may get stuck at any one of the stages, and need a defining event to push them into the next stage.

FORMING STAGE

Characterized by reserve and politeness; team members are often on their best behavior. This is not a time for making important decisions or expecting team members to be open or direct in their communication. DI teams in the forming stage may be very quiet (It's too scary to say anything) or very silly (I'll laugh at everything you do to show you that I care about you). Team members are dealing with issues of inclusion.

STORMING STAGE

Characterized by competitiveness among team members that expresses itself as arguments, digging in one's heels, or wanting credit and attention from the team. DI teams in the storming stage are often loud, interrupt each other and talk more about "I" and "me" rather than "we."

NORMING STAGE

Characterized by patterns of interactions and the ability to reach quick agreements. The team operates according to working agreements (could be explicit or implicit), roles have been defined; some major challenges not previously encountered may send the team back to the storming stage. DI teams in the norming stage generally accept each other and have learned how to work together and get themselves unstuck, though they are still fairly dependent on the Team Manager to direct their activities and set the agenda. Team members are dealing with issues of openness.

PERFORMING STAGE

Characterized by an emerging team identity. Team members willingly sacrifice in order to contribute to team success. The Team Manager moves into more of a support role. Team members are direct and open with each other on behalf of the team's goals and working agreements. DI teams in the performing stage take initiative to divide up work, stay in contact with each other between formal team meetings, and stay directed at meetings; generally accomplishing a lot of work.

ADJOURNING STAGE

Characterized by concluding the team's time together. This stage usually takes place after the tournament season has ended. There should be time for the team to celebrate their accomplishments and group achievements together. It is typical for teams to hold a celebratory party, reflect on their time together as a team and say personal goodbyes.

Team Managers are an integral part of helping teams cycle through the stages of group development. The following table will help you outline some strategies to help the team work through the different stages of group development.

Stage	Team Manager Strategy
Forming	<ul style="list-style-type: none"> • Focus on relationships. Help the team get to know each other and avoid focusing on major decisions. • A team stuck at this stage may need to be pushed into disagreeing with each other or competing with each other in order to initiate storming.
Storming	<ul style="list-style-type: none"> • Focus on the process. The team must learn to trust and respect one another. • Create more structure. The more structure, the easier it will be for the team members to assert their independence and uniqueness. • Don't try to bypass the storming stage. Team members will learn to be more open and trust one another if they have had an opportunity to compete with each other for the team's attention. • A team stuck in the storming stage may need a shared experience or success that helps them create a team identity which makes them feel like they're part of something they can be proud of. • Remind the team members to value everyone's input and to be respectful when disagreeing.
Norming	<ul style="list-style-type: none"> • Focus on results. As the team develops its working agreements, be sure to keep them posted in clear view at meetings. • Focus the team to pay attention to their plans and time lines. • Bring back issues that were left unresolved. • A team stuck in the norming stage needs encouragement to challenge one another to raise the bar or to face a significant conflict that they've been ignoring.
Performing	<ul style="list-style-type: none"> • Focus on results, the process and relationship. Help the team through some challenging interpersonal problems by encouraging them to be open and honest with each other in a safe, productive way. • Help the team hold each other accountable for high quality results.
Adjourning	<ul style="list-style-type: none"> • Focus on celebration. This stage is all about highlighting the team's progress and successes. Taking time to look back on how the team developed over the season will help them prepare for the next season.

TM Tip: A team may become stuck in one of the stages of group development. Some stages can be more challenging for a Team Manager to navigate than others. Many Team Managers find the storming stage to be the most difficult. Be patient with the team, but help them to move beyond the storming stage to the norming stage. A team that is stranded in the storming stage can be frustrated and paralyzed by the competitiveness that can exist between team members.

TIMELINE

DESTINATION IMAGINATION SEASON TIMELINE

Team Challenges take approximately 2 to 4 months to solve. Teams may need more or less time, depending on the team and the complexity of the solution it decides to create. Stages may overlap, sometimes a team may return to an earlier stage, and often stages will transition without a clear end to one and start of another.

As the members of your team work through their solution, they will find that they rotate through each stage of the creative process and project management cycle with each element of their Challenge solution they design: set, costumes, technical elements, story, etc. The outline below describes how your team members might use the stages of the creative process if they design a puppet as part of their Challenge solution:

STAGE 1: RECOGNIZE

- The team reads the part of the Challenge that defines the puppet

STAGE 2: IMAGINE

- The team generates a list of ideas to meet the Challenge requirements for the puppet

STAGE 3: INITIATE & COLLABORATE

- The team focuses their ideas and they decide together how they are going to meet the Challenge requirements
- The assigned team members then create the puppet

STAGE 4: ASSESS PROGRESS & PREPARE

- The team reviews the requirements set by the team to ensure the puppet meets them. If the puppet doesn't meet the requirements, the team can decide if they want to redo the puppet or change their initial requirements.

STAGE 5: EVALUATE

- The team presents the puppet at a local tournament and then the team celebrates what it has accomplished

TM Tip: Within the sessions are activities centered around project management steps developed by PMIEF for effectively managing a project. As a Team Manager, it may be helpful to collect each activity sheet to develop a complete project management journal that the team can use to document its DI journey from imagination to innovation.

TIMELINE

PLANNING A TEAM SESSION

Destination Imagination team sessions are social, active and fun. The activity-based team sessions that follow may take roughly 60 to 90 minutes each, and the momentum of the sessions often requires prior planning on the part of the Team Manager. They may also require flexibility, as some teams may require more or less time on particular portions of the sessions. Below there are two suggested meeting options for you to use if you would like.

You will need a space where the team can meet comfortably. Spaces that allow you to leave the team's materials in plain view can be beneficial, as are spaces with work tables and large writing surfaces. Team members should feel at home in the workspace, so they can focus on being creative, having fun and working together.

Here's a loose framework for a team session:

OPTION 1

Time	Activity
10 minutes	Ice Breaker
5 minutes	Team Goal Setting / Review
15 minutes	Instant Challenge
30 minutes	Team Building / Discussion
30 minutes	Team Challenge Development
5 minutes	Reflection Time

OPTION 2

Time	Activity
5 minutes	Team Goal Setting / Review
30 minutes	Instant Challenge
60-90 minutes	Team Challenge Development
5 minutes	Reflection Time

A FULL SHOPPING LIST

At the start of every session within Roadmap, we have provided a checklist of materials to collect and a list of pages to print for your team. For further convenience, we have compiled a full list of materials needed for the sixteen sessions contained within this guide.

Challenge Materials

- | | | |
|--|--|--|
| <input type="checkbox"/> 6 aluminum foil sheets | <input type="checkbox"/> 34 drinking straws | <input type="checkbox"/> 1 paper napkin |
| <input type="checkbox"/> 2 binder clips | <input type="checkbox"/> 2 egg cartons (empty) | <input type="checkbox"/> 3 paper plates |
| <input type="checkbox"/> 5 black craft foam sheets | <input type="checkbox"/> 1 envelope | <input type="checkbox"/> 19 pencils |
| <input type="checkbox"/> 2 boxes | <input type="checkbox"/> 1 piece of fabric | <input type="checkbox"/> 4 Ping-Pong balls |
| <input type="checkbox"/> 35 chenille sticks
(pipe cleaners) | <input type="checkbox"/> 1 golf ball | <input type="checkbox"/> 2 plastic bowls |
| <input type="checkbox"/> 1 pair of chopsticks | <input type="checkbox"/> 13 index cards | <input type="checkbox"/> 25 plastic cups (16oz) |
| <input type="checkbox"/> 2 clothespins | <input type="checkbox"/> 66 mailing labels | <input type="checkbox"/> 9 plastic spoons |
| <input type="checkbox"/> 5 colored paper sheets (any color) | <input type="checkbox"/> 2 marbles | <input type="checkbox"/> 1 piece of poster board or large sheet of paper |
| <input type="checkbox"/> 24 colored paper sheets; 3 per color (green, red, blue, purple, yellow, orange, black, brown) | <input type="checkbox"/> 1 roll masking tape | <input type="checkbox"/> 20 rubber bands |
| <input type="checkbox"/> 2 cotton buds | <input type="checkbox"/> 12 6in (15cm) nails | <input type="checkbox"/> 50 sticks of spaghetti |
| <input type="checkbox"/> 5 craft sticks (large) | <input type="checkbox"/> 7 newsprint sheets | <input type="checkbox"/> 23ft (7.25m) string |
| <input type="checkbox"/> 11 craft sticks (standard size) | <input type="checkbox"/> 1 paper bag | <input type="checkbox"/> 1 Styrofoam cup |
| | <input type="checkbox"/> 1 paper bowl | <input type="checkbox"/> 23 toothpicks |
| | <input type="checkbox"/> 27 paper clips | <input type="checkbox"/> 2 twist ties |
| | <input type="checkbox"/> 2 jumbo paper clips | <input type="checkbox"/> 1 ream of white paper |
| | <input type="checkbox"/> 5 paper cups | |

Everyday Team Materials

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> 2 basketballs | <input type="checkbox"/> highlighters | <input type="checkbox"/> 1 stopwatch/timer |
| <input type="checkbox"/> 1 blackboard, whiteboard or flip chart | <input type="checkbox"/> pens/pencils | <input type="checkbox"/> 1 tape measure |
| <input type="checkbox"/> colored markers | <input type="checkbox"/> scissors | <input type="checkbox"/> 1 yardsticks |

Around The House

- | | | |
|--|---|-----------------------------------|
| <input type="checkbox"/> 1 beach ball | <input type="checkbox"/> 1 fan | <input type="checkbox"/> 1 rag |
| <input type="checkbox"/> 1 button | <input type="checkbox"/> 2 maps | <input type="checkbox"/> 1 spoon |
| <input type="checkbox"/> 2 cans of food | <input type="checkbox"/> 1 plastic egg | <input type="checkbox"/> 1 zipper |
| <input type="checkbox"/> 3 cardboard boxes | <input type="checkbox"/> 1 prize (Race for Fluency) | |

SESSION 1

GOALS

1. Get to know each other
2. Learn the basics of the creative process
3. Help your team get started
4. Define the Challenge

The first step of the Destination Imagination experience is centered on team members building rapport and understanding what is expected of them throughout the season.

Always be encouraging and simply guide the team through the sessions. Also, feel free to use our tips and suggestions as necessary.

TM Tip: Document your observations of the creative process and make notes in this guide. Well-documented team sessions can help the team better evaluate and celebrate the experience. Documentation doesn't have to be formal or neat. Use the margins!

THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 25 sticks of spaghetti
- 9 mailing labels
- 1 yardstick
- 1 large sheet of paper or poster board
- colored markers
- pens or pencils
- paper
- stopwatch/timer

PRINT COPIES

- print a copy of "Spaghetti Structure"
- print a copy of the "Individual Specialties Inventory" for each team member
- print a copy of the "Individual Specialties Tally Sheet" for each team member
- print a copy of the "Team Specialties Tally Sheet"
- print a copy of the "Interference Contract" for each team member
- print a copy of "Advertise"
- print a copy of the "Team Choice Element Specialties Chart" for each team member

ACTIVITY 1: BY THE NUMBERS

Each team member will be given a piece of paper and will write a category of their choosing at the top of the paper. (For example, "Movie," "Song Lyric" or "Hiding Place.") Make sure that there are no repeated categories.

Team members will then pass their papers to the right. On the piece of paper that has been passed to them, the team member should write their name and their top three favorite things that correspond to the category. Encourage them to be thoughtful and honest. Continue passing papers to the right and adding favorite things to the lists until each team member has written on each sheet of paper. Your team can also repeat the activity with new categories.

Everyone now has a list of their team members' favorite things! Take time to discuss each list, and keep the lists for your records. At the end of the activity, ask the team members to vote on their top 5 favorite things across all categories, and record them in the chart below.

WRITE DOWN FIVE OF YOUR FAVORITE THINGS HERE

1
2
3
4
5

ACTIVITY 2: 3D HUMAN SCULPTURES

Have the team work together to use their bodies to create shapes, designs, and objects. They must include all team members in the sculpture. Start with easier sculptures, like triangles, rectangles, diamonds, squares, etc. Work toward more complex objects like flowers, a book, elephants, helicopters, eating utensils, etc. As they become adept at moving from one shape to another, have them add movement to their sculptures (snake that moves across the room, airplane that flies, rollercoaster, etc.).

TM Tip: Joining in on the play will build trust and help you connect with your team.

ACTIVITY 3: EXAMINE CHALLENGES AND SCORING STRUCTURE

TAKE TIME TO RUN THE TEAM THROUGH WHAT IT NEEDS TO DO THE SCORING STRUCTURE

The Team Challenge is worth a total of 300 points and has two parts: the Central Challenge and Team Choice Elements. (Except for the Improvisational Challenge, which doesn't require Team Choice Elements.)

- ★ Central Challenge: This is a project with a number of requirements that will take your team eight to sixteen weeks to solve.
- ★ Team Choice Elements: Team Choice Elements allow your team to create two elements not required in the Central Challenge, and integrate them into your Presentation. Team Choice Elements showcase your team's "specialties" – your unique abilities, interests, skills and/or talents. You may create anything you wish for Team Choice Elements. (Again, there are no Team Choice Elements required in the Improvisational Challenge.)
- An Instant Challenge is a Challenge that teams are asked to solve in a very short period of time at the tournament without knowing ahead of time what that Challenge will be. It is worth 100 points.

TEAM CHALLENGES

Your team will most likely spend the majority of its time developing and refining its Team Challenge solution. There are seven types of Team Challenge: Technical, Scientific, Fine Arts, Improvisational, Engineering, Service Learning and Noncompetitive (for early learners).

INSTANT CHALLENGES

The Instant Challenge accounts for one-fourth of your team's tournament score, so your team should pay attention to it! Each year, a variety of Instant Challenges are created. Some of the Challenges require divergent thinking (i.e., out of the box creativity), while others have been developed to emphasize teamwork and convergent thinking (i.e., in the box creativity). There are three types of Instant Challenges: Performance-Based, Task-Based and a combination of the two. (You can tell quickly what type of Instant Challenge it is by looking for the uppercase words "PERFORMANCE" or "TASK" in the Challenge.) Because your team has no guarantee which type of Instant Challenge it will be asked to solve at the tournament, your team should practice all three types.

Instant Challenges can be broken up into smaller subsets beyond just Performance or Task. Below is a useful chart to help you further categorize Instant Challenges:

Performance	Combination	Task
With Props	Any combination of Performance and Task-Based Instant Challenges	To Build: Height, Width or to Hold Weight
Without Props		To Move
With Imaginary Props		To Protect
With Team-made Props		To Communicate
		To Change

TM Tip: As you select Instant Challenges for the team, be sure to include a variety from the categories above.

ACTIVITY 4: HOW INSTANT CHALLENGES WORK

PROCEDURE

1. The team stands around a table on which a copy of the Challenge lies face down.
2. If the Challenge requires materials, they will also rest on the same table. Your team may not touch the materials until time starts.
3. When everyone is ready, the Team Manager flips over the Challenge.
4. The Team Manager reads his or her copy of the Challenge aloud. As soon as the Team Manager is finished reading, he or she starts the timer and the team can begin working.
5. The Team Manager makes sure the team follows the timing prescribed in the Challenge. Since the team is not allowed to take any timing devices, including wristwatches, into the Instant Challenge room at the tournament, team members should practice asking the Appraisers for the time remaining in the Challenge. The Team Manager may only report how much time is left if the team asks, or if the Instant Challenge lists it in the procedure.
6. The Team Manager scores the team's solution to the Challenge. It is also helpful to have the team score itself.



PROCESSING

Afterward, it's important that the team members discuss the experience. The Team Manager's job is to facilitate the discussion as necessary, without telling the team exactly what to do. However, the Team Manager may provide objective observation about team behavior as the team works through an Instant Challenge. For example, the Team Manager can ask questions like:

- What could you have done differently?
- What was the most difficult part of the performance or the task?
- What could you do to improve in the future?

The Team Manager shouldn't provide any answers to the questions. Team members need to reflect and assess the process on their own based on objective information.

TM Tip: To help build strong critical thinking skills, the Team Manager needs to model for the team what objective information looks like. You can do this by:

- Repeating what a team member actually says without interpreting the meaning.
- Observing team members' behavior while solving the Challenge.
- Taking notes as the team works so you can accurately report what you see.
- Recording the team so you can point out what is said or done and allow the team members to evaluate their solution based on their observations of the recording.

IMPORTANCE OF INSTANT CHALLENGE

The Instant Challenge component is worth 25% of your team's overall total score at a tournament. Often, a solid Instant Challenge score will help a team significantly, especially if Team Challenge scores are very close. Your team should be diligent about practicing and preparing for all types of Instant Challenges that they may receive at a tournament. Although they are never the same, there are certain skills that can drastically improve your team's chances at being successful on tournament day.

NOTE TO TEAM

Don't worry about perfection this early in the process. Just direct on having fun and giving it your best shot! This is also a chance for you to get used to the format, procedure and scoring of Instant Challenges. Pay particular attention to the scoring, which can help you determine how to best solve the Challenge.

TM Tip: When your team is beginning to learn about Instant Challenges, start with Challenges that are simple to solve, to give the team a chance to succeed together. As they gain experience, you can increase the difficulty of the Challenges. If the team is completely stuck on a Challenge, stop and have them try again on another day. If the team is still struggling, you can teach them about the materials they are using, talk them through potential solutions, or go back to an easier Challenge. Remember that processing after the Challenge, whether the team was successful or not, is an important part of the learning process. It will help the team members internalize what they learned.

TEAM ROLES

Teamwork does not mean that all team members must be working together on the same thing at the same time. In fact, teams work better when they can divide up tasks into smaller and more manageable pieces. Below are some key team roles that will be useful to the team as they work through their Team Challenge and during their Instant Challenge.

Task Manager: in charge of the overall development and implementation of a Task-Based Instant Challenge or task elements in the Team Challenge

Performance Manager: in charge of the overall development and implementation of a Performance-Based Instant Challenge or performance elements in the Team Challenge

Timekeeper: in charge of asking the Appraisers for the amount of time that remains for the team to solve its Instant Challenge or keeping track of time during the team's Team Challenge Presentation at a tournament

Materials Manager: in charge of making sure that materials are used thoughtfully because in most Instant Challenges they do not come in unlimited quantities

Score Manager: in charge of keeping track of where the team will receive the most points in a Challenge situation and making judgments about where the team should focus its time

Flex Team Member: has the ability to float between numerous positions or fill in a new one if necessary

Team members should have practice taking on each role and expanding themselves into new roles that have not been defined here. The best teams are made up of those who understand and respect the roles of others while still being able to solve the Challenge. Other roles that exist when it comes to developing the Team Challenge solution will include: Project Manager, Quality & Risk Manager, Communications Manager and Resource Manager, among others.

TM Tip: Using cards or pieces of paper, write a different role on each. Have the team members randomly draw for a role to fulfill during an Instant Challenge. This gives each team member the opportunity to try different roles, to understand the importance of each role, and to discover the role that fits him or her best.

ACTIVITY 5: SPAGHETTI STRUCTURE

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

CHALLENGE

Your TASK is to build a freestanding structure that is as tall as possible and is made only of spaghetti and mailing labels.

TIME

You will have up to 2 minutes to discuss strategy, and up to 6 minutes to build your structure.

PROCEDURE

Part One (2 minutes): Discuss strategy.

Part Two (6 minutes):

- Using only the materials given, build a structure on the floor that is as high as possible.
- You should also try to use the materials in different and creative ways in your structure.
- You may measure the height of the structure at any time, and the structure must be stable for long enough to be measured.

MATERIALS

- 25 sticks of spaghetti
- Yardstick (used for measuring the structure)
- 9 mailing labels

SCORING

- A. 3 points for each full inch of height of your structure.
- B. Up to 20 points for how creatively you use the materials.
- C. Up to 20 points for how well your team works together.



NOTES

How did the team do? Use this space to make some notes to read later, so the team can track its progress.

PROCESSING QUESTIONS

- Did all team members contribute to the creation of the tower?
- How did each person contribute differently?

TM Tip: In this activity, the team will experience the entire creative process for the first time. Please refer to the section of Roadmap that discusses the creative process for more information about the process.

ACTIVITY 6: TEAM CHOICE ELEMENT INVENTORY

The Team Choice Element Inventory is a four-part activity. It is a good session starter because it allows team members to learn more about each other. Instructions are on each form, so simply follow these steps:

1. First, have each team member fill out the Individual Specialties Inventory.
2. Second, have the team add their scores on the Individual Specialties Inventory.
3. Third, combine all team member scores on the Team Specialties Tally Sheet.
4. Fourth, discuss the results and discuss ways to incorporate your team's talents and specialties into the Team Challenge.

PART ONE: INDIVIDUAL SPECIALTIES INVENTORY

Scale: 0 – Not applicable 1 – Rarely 2 – Occasionally 3 – Frequently 4 – Usually 5 – Almost Always

#	Statements	Scale	#
1	I like to make up puns, rhymes and jokes.	0 1 2 3 4 5	1
2	When given the opportunity, I love to play brainteaser games that require logical thinking.	0 1 2 3 4 5	2
3	Whenever I can, I listen to music on the radio or on an MP3 player.	0 1 2 3 4 5	3
4	I work best when I can get up and move around.	0 1 2 3 4 5	4
5	I love to do mazes, hidden object and jigsaw puzzles.	0 1 2 3 4 5	5
6	I'm the kind of person who people come to with problems and to discuss important issues.	0 1 2 3 4 5	6
7	I write in a journal or diary to record things that I think and care about.	0 1 2 3 4 5	7
8	I love to be outdoors whenever I can.	0 1 2 3 4 5	8
9	In my artwork, I use lots of patterns using colors and shapes.	0 1 2 3 4 5	9
10	I like to get involved, so I join groups or clubs.	0 1 2 3 4 5	10
11	I like finding just the right word when I write.	0 1 2 3 4 5	11
12	I would like to study about how different people have used certain plants for medicine.	0 1 2 3 4 5	12
13	I like sports and most physical activities.	0 1 2 3 4 5	13
14	I remember most TV jingles and can recall songs after only hearing them once or twice.	0 1 2 3 4 5	14
15	Before I begin a project, I have figured out a step-by-step procedure for myself.	0 1 2 3 4 5	15
16	I love spending time alone pursuing some personal hobbies and interests.	0 1 2 3 4 5	16
17	When I give directions, I draw a picture to explain it better.	0 1 2 3 4 5	17
18	I have strong opinions and tend not to follow the crowd.	0 1 2 3 4 5	18
19	Math and science are my favorite subjects in school.	0 1 2 3 4 5	19
20	I find the reading and writing part of school easier than the math and science parts.	0 1 2 3 4 5	20
21	I love to help others learn new skills.	0 1 2 3 4 5	21
22	I would have lots of pets, if my parents would let me!	0 1 2 3 4 5	22
23	When I do a presentation, I always include music.	0 1 2 3 4 5	23
24	I enjoy doing things with my hands such as model building, crafts, art, or carpentry.	0 1 2 3 4 5	24

PART TWO: INDIVIDUAL SPECIALTIES TALLY SHEET

Print a copy of this sheet for each team member. Have each team member write his or her score for each statement to the chart below, and add the scores as grouped. The sums can help team members determine their individual specialties. The highest totals most likely indicate the areas of their greatest interests or strengths. These results may also indicate the ways in which they best learn!

A. Interpersonal

$$\frac{\quad}{\#6} + \frac{\quad}{\#10} + \frac{\quad}{\#21} = \underline{\quad}$$

B. Intrapersonal

$$\frac{\quad}{\#7} + \frac{\quad}{\#16} + \frac{\quad}{\#18} = \underline{\quad}$$

C. Logic and Mathematics

$$\frac{\quad}{\#2} + \frac{\quad}{\#15} + \frac{\quad}{\#19} = \underline{\quad}$$

D. Musical

$$\frac{\quad}{\#3} + \frac{\quad}{\#14} + \frac{\quad}{\#23} = \underline{\quad}$$

E. Nature and Environment

$$\frac{\quad}{\#8} + \frac{\quad}{\#12} + \frac{\quad}{\#22} = \underline{\quad}$$

F. Physical Movement

$$\frac{\quad}{\#4} + \frac{\quad}{\#13} + \frac{\quad}{\#24} = \underline{\quad}$$

G. Words and Language

$$\frac{\quad}{\#1} + \frac{\quad}{\#11} + \frac{\quad}{\#20} = \underline{\quad}$$

H. Visual and Spatial

$$\frac{\quad}{\#5} + \frac{\quad}{\#9} + \frac{\quad}{\#17} = \underline{\quad}$$

PART THREE: TEAM SPECIALTIES TALLY SHEET

To determine the strengths of your team, add the total of each team member in each of the eight areas. The team's highest scoring categories should indicate your team's areas of specialty.

Team Member	A	B	C	D	E	F	G	H
1.								
2.								
3.								
4.								
5.								
6.								
7.								
Total								

A. Interpersonal = _____

B. Intrapersonal = _____

C. Logic and Mathematics = _____

D. Musical = _____

E. Nature and Environment = _____

F. Physical Movement = _____

G. Words and Language = _____

H. Visual and Spatial = _____

What if there are many clear-cut specialties indicated?

It can happen that a team's areas of strength are spread evenly across the entire list of specialties. For example, there may be approximately equal scores in the areas of Logic and Mathematics, Music, and Physical Movement. This means the team has several areas of specialty. In that case, the team has even more options for its Team Choice Element creations!

What if the team only seems to have one clear-cut specialty?

This does not mean that the team members do not have many and diverse areas of strength, but rather, that many team members lean toward a specific type of interest or skill area.

In that case, the team should look closely at some of the individual team member's specialties and see if there are any areas that are clear specialties for one or more team members, and create Team Choice Element options from those areas of specialties.

TM Tip: Teams do not have to base their Team Choice Elements on the specialties indicated in this Inventory. Teams may choose to create Team Choice Elements from any area of specialty they choose.

PART FOUR: TEAM CHOICE ELEMENT SPECIALTIES CHART

The team can use the chart below for some samples of specialties and ways the team can show them off. These are just some ideas. Teams are not limited to these options.

SPECIALTY	SOME TEAM CHOICE ELEMENT IDEAS
<p>Interpersonal Working in groups; communicating; socializing; caring for others; showing concern; cooperation; etc.</p>	<p>Demonstration of teamwork well beyond what is necessary to solve the Challenge; group harmony; teamwork in manipulation of props; group communication system; extreme collaboration; cooperative project; etc.</p>
<p>Intrapersonal Exploring their feelings; knowing or understanding themselves and why they do the things they do; understanding their place in the universe; self-awareness; autobiographies; etc.</p>	<p>Developing one or more characters who explore their feelings/thinking/moods/emotions, or assess themselves; writing poetry or music that expresses deep feelings or emotions; etc.</p>
<p>Logic and Mathematics Logic, mathematics; principles of physics; analyzing, comparing and contrasting; identifying patterns; deciphering codes; reasoning; collecting data; etc.</p>	<p>Use of patterns such as tessellations, codes, mazes, puzzles; use of surveys, tabulations, graphs in Presentation; use of mathematical principles such as fractions or multiplication; application of principles of physics (machines, technology); use of data, formulas, calculations; etc.</p>
<p>Musical Singing; playing instruments; listening to music; composing music; music appreciation; etc.</p>	<p>Composing original music; singing and/or harmonizing; creating instruments; playing instruments; use of rhythm and/or percussion; creating vocal sounds or tones, etc.</p>
<p>Nature and Environment Understanding and learning about the natural world; categorizing plants, rocks, animals, etc.; ecology and/or wildlife studies; learning about atmosphere, weather, and/or constellations; etc.</p>	<p>Use of ecological issues in Presentation; depiction of authentic natural environment, animals, insects, plants, natural habitats, constellations; use of natural resources in Challenge solution; depiction of natural phenomena; etc.</p>
<p>Physical Movement Dancing; physical exercise; acting; working with their hands; martial arts; sports; games involving physical ability; hands-on learning; manipulating puppets; etc.</p>	<p>An original dance; physical or gymnastic demonstration; acting out roles; pantomime; use of dramatic bodily movement; construction and/or manipulation of props; etc.</p>
<p>Visual and Spatial Creating visual art; designing; creating pictures, illustrations, drawings, maps; inventing; sculpting; building models; working with color schemes; construction; engineering; creating gadgets; etc.</p>	<p>Sculptures, paintings, posters, mosaics, or other physical works of art; set, scenery, and/or costume design; creating unique and innovative props; creative use of color; innovative uses for ordinary materials; technical design; construction; etc.</p>
<p>Words and Language Working with words, both written and spoken; creative writing; poetry; dramatic readings; debating; telling jokes and stories; playing word games and solving word puzzles; reading and writing plays; etc.</p>	<p>Use of puns, rhymes, poems; use of imagery and colorful words; creating unique and memorable characters; writing and reporting news stories; broadcasts; use of accents; storytelling; presenting a debate on an issue; use of humor; script writing; etc.</p>

ACTIVITY: 7: INTERFERENCE POLICY

Here's why a lot of Destination Imagination participants return every year: only team members may contribute ideas and create the Team Challenge solutions. That means that no one other than team members can contribute to the Central Challenge or Team Choice Elements. Help from non-team members—including parents, friends and the Team Manager—is called "Interference." Make sure team members and parents review their copies of the following Interference Contract and sign them. These contracts are solely to help everyone understand and follow the rules of Interference. Keep the forms for your team records.

Additional information about Interference is included in Rules of the Road.

TM Tip: Later, when your team attends a tournament, you will need to fill out a Declaration of Independence form and bring copies for Tournament Officials. That form also centers on Interference and can be found in Rules of the Road.

INTERFERENCE CONTRACT

TEAM MEMBER: OUR TEAM OWNS EVERY BIT OF OUR TEAM CHALLENGE SOLUTION

1. Every idea for every part of the solution must come from the members of our team. Our parents, friends, teachers and Team Manager must keep their ideas to themselves.
2. When someone offers to help us, or works on our solution in any way, we will say, "No thanks! We can do it ourselves!"
3. If we get stuck and can't figure out how to solve a problem that arises, we will create ideas and come up with another way to do it.
4. When we finish our solution, we can proudly sign the Declaration of Independence and know that the entire solution is ours.

Team Member Signature: _____

TEAM MANAGER(S): MY TEAM OWNS EVERY BIT OF ITS TEAM CHALLENGE SOLUTION

1. I can facilitate the team's understanding of the Challenge and rules, as well as help them to learn skills, but I must keep my ideas to myself, and my hands off the team's solution.
2. Every idea for every part of the solution must come from the members of my team. They can figure it out for themselves even if it means that sometimes they will have to change their plans and do something another way.
3. At the team's request, I may acquire specifically requested materials for team use. At no time may I ever choose materials for the team without the team's input, and I may never select materials or take actions or ask questions with the idea of leading the team to a solution.
4. When my team does not know how to go about researching and/or acquiring information and materials, my role is to teach them the skills they will use to become independent learners for a lifetime. In other words, I may provide the team with multiple resources, but I may not select or lead the team to any aspect of its solution.
5. When my team is ready to turn its ideas into reality, I will stand by and manage. That means I may facilitate discussions and/or disagreements, help my team manage its time to meet its deadlines, make sure team members are working in a safe manner, acquire items requested by the team, and most importantly, ensure that each individual on the team is valued by the others.
6. When my team finishes its solution, I can proudly sign the Team Manager's line on the Declaration of Independence and know that the solution is the team's alone.

Team Manager Signature: _____

Team Manager Signature: _____

PARENT(S)/GUARDIAN(S): THE TEAM OWNS EVERY BIT OF ITS TEAM CHALLENGE SOLUTION

1. I must keep my ideas to myself and my hands off the team's solution. I understand that completing a DI Challenge can be difficult at times, but I believe the team is capable of handling whatever they encounter and can overcome anything. I understand that, if I interfere, I send the message to the team that I do not trust that they are capable of creating the solution on their own.
2. Every idea for every part of the solution must come from team members. They must figure it out for themselves. That means that sometimes they will do things in a way that will take longer and/or might not be the most efficient or best way (in my opinion). I understand that this is a normal part of the process and I will not interfere.
3. When my my child's team finishes its solution, I will be proud that the team members worked so hard and completed the project with their own hands and minds. I will be proud to say that they did it all by themselves!

Parent/Guardian Signature: _____

Parent/Guardian Signature: _____

ACTIVITY 8: ADVERTISE

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Your TASK is to design and create a billboard that advertises something without using words or numbers, and then to present a PERFORMANCE in which you show the billboard being used for advertising.

For this Challenge, a “billboard” is a large outdoor sign.

TIME

Your team will have up to 6 minutes to create your billboard advertisement and plan a PERFORMANCE, and up to 3 minutes to present your PERFORMANCE.

THE SCENE

Often you don’t have time to read a billboard as you pass by. Your team is to create a billboard that doesn’t use any words or numbers that need to be read.

MATERIALS

- 1 large sheet of paper or poster board, on which you can create your advertisement
- 8 markers
- A sheet of paper and a pencil will be available for your team to use as you plan and present your PERFORMANCE.

SCORING

- A. Up to 30 points for the creativity of your billboard.
- B. 10 points if your PERFORMANCE has a beginning, a middle and an end.
- C. 10 points if you show how your billboard would be used for advertising in your PERFORMANCE.
- D. Up to 30 points for the creativity of the PERFORMANCE.
- E. Up to 20 points for how well the team works together.



PROCESSING QUESTIONS

- How did your team create its solution?
- Did team members take on different roles? Did they feel comfortable in those roles?
- Did you build the story around the billboard or the billboard around the story? Why?
- Is it important to understand that not everyone can read words or numbers?

NOTE TO THE TEAM

This is the final activity for the session. Encourage team members to get their Interference Contracts signed before the next meeting.

SESSION 2: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- pens or pencils
- 2 straws
- scissors for each team member
- 2 index cards
- stopwatch/timer
- 2 chenille sticks (pipe cleaners)
- 1 sheet of paper
- 4 mailing labels
- 1 pencil
- 2 cotton buds
- 4 index cards
- 12in (30cm) of string
- 2 basketballs
- 10 16oz plastic cups
- 2 bowls
- 1 12in (30cm) piece of string per team member
- tape
- 1 rubber band

PRINT COPIES, ETC.

- print a copy of "Stack 'Em Up"
- print a copy of "Food for Thought"
- print three copies of the "Idea Generation Chart" for each team member
- have space for "Team Name"
- print a copy of "Ball Bridge"

ACTIVITY 1: STACK 'EM UP

FOCUS: TEAMWORK

Place a stack of 10 plastic cups upside down on a table. Work together as a team and use only the rubber-band-and-string device provided to stack the cups into a pyramid. The pyramid should have four cups in the bottom row, three in the next row, two in the next row, and one cup in the top row. Each team member must hold his or her string by its loose end.

The team may take 1 minute to plan, and then the team will have 6 minutes to build the pyramid. The team may not talk when it is stacking the cups.

NOTE TO TEAM

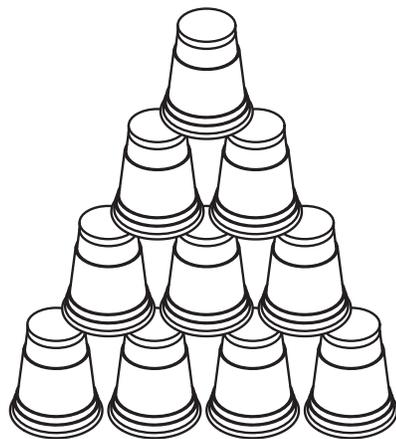
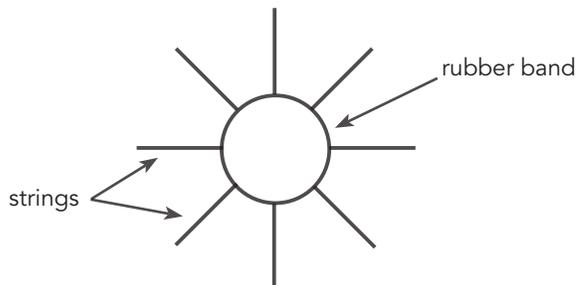
Feel free to try this activity again. Can the team build the pyramid faster the second time? For a change of pace, try leaving the stack of cups in the same place, but ask the team to build the pyramid across the room. The team can also flip the stack of cups, so the cups are right side up, to make the activity more difficult.



PROCESSING QUESTIONS

- How well do you feel your team communicated?
- Was there one person leading or were there multiple “leaders”?
- Is there another strategy that you could have used to stack the cups that may have worked better?

TM Tip: At a later time, give the team the same task. Provide the team with string and rubber bands. Ask the team to build a different device. Have the team reflect on the difference between when the team was provided a ready-made device versus a team-created device.



ACTIVITY 2: FOOD FOR THOUGHT

FOCUS: IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Present a PERFORMANCE in which you serve a meal to a famous person.

For this Challenge, “famous” means that most people would know who this person is. The person may be real or imaginary.

TIME

You will have up to 4 minutes to use your IMAGINATION to plan and practice your PERFORMANCE, and up to 3 minutes to present your PERFORMANCE to the Appraisers.

THE SCENE

Think of a famous person whom you could feed. Once you have chosen your person, create a three course meal for that person, including an appetizer, main dish, and dessert.

You should make your skit creative with a beginning, middle, and an end. You should include all members of your team who are participating in this Instant Challenge in the skit.

MATERIALS

A piece of paper and a pencil will be available for your team to use as you plan your PERFORMANCE.

SCORING

You will receive up to:

- A. 10 points if you serve a three course meal to a famous person in your skit.
- B. 10 points if your skit has a beginning, middle, and an end.
- C. Up to 10 points (30 points maximum) for the creativity of each of your courses.
- D. Up to 30 points for the creativity of the PERFORMANCE.
- E. Up to 20 points for how well your team works together.

ACTIVITY 2: FOOD FOR THOUGHT (CONT'D)

TM Tip: Make everyone feel comfortable and encourage them through the process. Remember to discuss the Instant Challenge after the team is scored. Feel free to mark up Roadmap to make some notes to read later, so the team can track its progress.



PROCESSING QUESTIONS

- Which aspect of the Challenge was worth the most points?
- Did your prep-time strategy take this into consideration?
- During the performance did team members face one another while conversing?
- Did they face the Appraisers?
- Which part of the performance worked best and why?

TM Tip: While performing in front of any audience (even if there isn't one) designate an area where the audience or Appraisers would be sitting. Make sure that your team, when speaking to one another in the performance, stands at a 45-degree angle between the audience and the person they are conversing with. If they are narrating or thinking out loud this does not necessarily apply. Then they can directly face the audience. This advice will also be applicable for the Team Challenge Presentation at the tournament. Often, teams will present on an auditorium stage or in a gymnasium. It is important to speak loudly and clearly so that everyone can hear what is happening in the Presentation.

ACTIVITY 3: TEAM NAME

You will need lots of floor space for this activity.

IDEA GENERATING

1. Hand out three copies of the “Idea Generation Chart” to each team member.
2. Over the next several minutes, your team will generate ideas for a brand new team name. No one should talk in this stage of the process. Have the team members write down their ideas for team names on their papers. Each idea should go in a separate cell of the table.
3. In this stage, the ideas don’t have to be fully formed. Encourage fluency of ideas, and have the team members write down anything they can think of, as soon as they think of it.
4. After the team cannot generate any more ideas, have the team members use scissors to cut their charts on the dotted lines. Each team member should have a stack of his or her ideas on paper.

IDEA FOCUSING

1. Next, have one team member present each of his or her team name ideas, one at a time, so everyone else can understand them. After each idea is presented, have the team member place it on the floor in full view. Have the team member group similar ideas. For example, “flowers” and “petals” might be grouped.
2. Have the other team members follow by presenting their ideas and grouping them as necessary. They can group their ideas with ideas from other team members.
3. Have the team discuss its favorite ideas or groupings.
4. Each team member has three votes for his or her favorite groupings. Make note of the votes, and you’ll have the ideas ranked by popularity!

TM Tip: The creative process can apply to many scenarios, and it’s important to become familiar with it. As you continue through Roadmap, you’ll revisit the process and apply it in different ways.

Remember, this process is very fluid. Your team can return to generating ideas as often as necessary, even after you have focused your ideas. For example, team members might generate new ideas after seeing other ideas from their team members. Have them record and share any such ideas. For this activity, work toward finding a team name, but don’t force the team to pick a name if they can’t agree.

ACTIVITY 4: BALL BRIDGE

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

CHALLENGE

Your TASK is to build a bridge that rests on two basketballs.

TIME

You will have up to 5 minutes to use your IMAGINATION to complete your TASK of building a bridge, and then up to up to 2 minutes to adjust your bridge if you need to.

SETUP

There is a table and in the middle of the table are 2 taped lines 12in (30cm) apart. On the table are materials and 2 basketballs in bowls.

PROCEDURE

Part One (5 minutes): Use the materials on the table to build a bridge between the 2 basketballs. The basketballs must remain in the bowls and be placed outside of each of the taped lines. Your bridge must rest on top of the basketballs, may NOT be attached to the basketballs, and may NOT touch the table or bowls.

Part Two (2 minutes): Adjust your bridge if you need to. You may call time at any point. The bridge must remain on the basketballs for at least 5 seconds after you call time in order to receive score.

MATERIALS

- | | |
|--|--|
| <input type="checkbox"/> 2 straws | <input type="checkbox"/> 2 cotton buds |
| <input type="checkbox"/> 2 chenille sticks (pipe cleaners) | <input type="checkbox"/> 12in (30cm) of string |
| <input type="checkbox"/> 4 mailing labels | <input type="checkbox"/> 2 basketballs |
| <input type="checkbox"/> 4 index cards | |

The basketballs may not be damaged. The mailing labels may NOT be attached to the basketballs.

SCORING

- A. 20 points if you have a bridge between the 2 basketballs at the end of Part Two.
- B. 10 points (20 points maximum) for each chenille stick you do NOT use in your bridge.
- C. 10 points if you do NOT use the straws in your bridge.
- D. Up to 30 points for the creativity of your bridge.
- E. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- Did some of the team members do different jobs in this Challenge?
- What was the most difficult part of this Challenge?
- How might using the straws or chenille sticks make the task easier?
- Can you think of another way you could have built the bridge so it could have been even longer?

SESSION 3: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 25 sticks of spaghetti
- 9 mailing labels
- 1 ping pong ball
- 1 golf ball
- colored markers (a different color for each team member)
- pens and pencils
- tape measure
- stopwatch/timer
- blackboard, whiteboard or flip chart (you can use plain paper if needed)
- Destination Imagination Program Materials (for team review)

PRINT COPIES

- print a copy of each Team Challenge title page (from the Program Materials) for each team member

ACTIVITY 1: SHAPE UP

Start by handing each of the team members a piece of paper and a different colored marker. Then ask each team member to choose a different shape (e.g., triangle, cube or trapezoid). Have the team members use their markers to draw their chosen shapes three times on their papers, however they choose. Once they are done, have them pass their papers to the right.

Then ask them to draw their shapes three times, however they choose, on the papers now in front of them. Then, once again, have them pass the papers to the right. Repeat until everyone has drawn on each paper. You now have team-created art!

TM Tip: Once the team has completed the activity, have them use their newly created works of art to tell a story. A variation on this activity would be to have each team member tell an ongoing story that is related to the shapes that he or she adds to the individual pieces of paper.



What does this activity tell the team about teamwork? What about the creative process or collaboration? How can the lessons of this activity apply in other activities? Write down some team comments here. You can use them later so the team can track its progress.

ACTIVITY 2: REVIEW THE TEAM CHALLENGES

If it hasn't already, your team should start thinking about which Team Challenge it wants to solve. The quickest way for teams to get a feel for each Team Challenge is by reviewing the Points of Interest, which are listed on our Challenge Previews webpage and at the beginning of each Team Challenge. Take the time to read each of the Points of Interest to your team, and let the team members discuss what they think about the Challenges.

The team should discuss each Team Challenge. In order to be sure they fully understand the Challenges, teams often take time to rewrite any sections of the Challenges they find unclear. This is very important, as your team members should have a firm grasp of what they can and can't do in their solutions. Have the team pay particular attention to the scoring sections of the Challenge, which break down how the team's solution will be scored. The team should also refer to Rules of the Road for an understanding of program rules and their relationship to Challenge solutions.

Your team can also use its knowledge from the "Team Choice Element Inventory" from the first Session. It can help the team to reflect on individual strengths and team tendencies when choosing a Team Challenge. However, don't let the "Team Choice Element Inventory" dictate the team's choice. The team can choose any Challenge it wants.

ACTIVITY 3: LEARNING TO READ A CHALLENGE

DI Challenges contain many different and varied elements for the team to solve. While this is intentional, it can also lead to the team becoming confused, especially new or younger teams. They may only focus on one element when there are a number of elements to address.

The team needs to read and understand the entire Challenge before it starts to solve it. If team members attempt to solve the Challenge using only the brief Challenge descriptions, they will almost certainly miss important scoring elements. It is essential to read and understand the entire Challenge to ensure that the team is able to meet all of the criteria when designing its solution.

In every Team Challenge, there is a helpful pie chart that gives a breakdown of all the scored elements. This pie chart can always be found under the scoring section. If the team is devoting all of its energy to an item that is only worth a few points (or no points), it should shift to something else. The team will want to spend plenty of time understanding the scoring breakdown, but make sure they don't spend all of their time on the score breakdown. They will miss some important details that are explained in the Challenge write-up.

Scored elements often have special rules that determine how they will be appraised. If the team needs a technical device, there are unlimited ideas that they may come up with. But what if that device needs to move objects? Or be made of recycled materials? If they only read the scoring breakdown, they risk missing important Challenge elements.

Real understanding comes from identifying the items that will be scored, listing those items by order of importance to the team (importance may not just be score-- it can also be what the team is most interested in), and then reading the specific sections of the Challenge that pertain to each element.

To effectively solve the Challenge, the ideas the team creates will need to aim toward a solution that addresses the Challenge. It's well worth their time to take a meeting and make sure that every team member fully understands the Challenge. Only when they truly understand what the Challenge is can they begin to solve it.

QUICK TIPS TO HELP YOU NAVIGATE YOUR CHALLENGE

1. Grab some highlighters, go through your Challenge and highlight the following:
 - "Must" – highlight all sentences that include the word **MUST** in yellow.
 - "Will" – highlight all sentences that include the word **WILL** in pink (except for the sentences that have the phrase, "will earn points").
 - "May not," "will not," "can't," "won't," "no," "not" – circle all sentences that contain one of these words.
 - "Points" – highlight all sentences that include the words **POINTS** in blue.
 - "May" – highlight all sentences that include the word **MAY** in green.
2. The items that are circled or highlighted in yellow and pink are the "rules" your team must follow to solve this Challenge.
3. The items highlighted in blue and green are the areas where your team gets to decide what and how to do the task or activity.

ACTIVITY 4: DECISION MAKING MATRIX

Throughout your team’s season, there will be hundreds of decisions to be made. Reaching quality decisions in an efficient way that preserves relationships among team members may seem like an impossible goal. Everyone has had experiences with group decision making where we have walked away feeling dissatisfied with the outcome, the process, or our relationship with others in the group.

Teams generally believe there are only two ways to reach a conclusion:

1. Voting
2. Consensus

However, there are alternatives. One alternative is for a single team member to make a decision for the whole team, as long as the team has created some rules about how and when an individual is empowered to make the call. The following are a few decision-making rules that actual DI teams use which allow a single team member to make a decision for the whole team under certain circumstances:

1. If the group can’t reach a quick conclusion about their approach to solving an Instant Challenge, the Task or Performance Manager (reference the Team Roles section of Roadmap) can make the decision based on everyone’s input.
2. The main script writer for the team can act as the final decision maker if the team can’t reach a consensus about a plot point they’re discussing.
3. Some teams use the Individual Specialties Inventory that can be found in Session 1, Activity 6 of Roadmap to talk about special skills of different team members. When a decision related to an area of strength for one of the team members comes up, that team member can become the final decision maker.

In each of these cases, the team has taken the time to think through different roles in different situations and has included a certain amount of decision-making authority into the description of the role. One practical way to clarify decision making is to spend time early in the season building a matrix that the team can use throughout the season. Here is an example of a decision-making matrix.

Decisions related to...	Decision Maker(s)	Consensus	If we can’t reach consensus
Meeting times and dates	Team Manager		
Which Challenge we solve		X	Use a tool from Roadmap
Our story		X	Amanda decides
Costumes and props	Danielle with input from the team		
Technical elements	Diego and Emily		
Task-Based Instant Challenges	Sofia with input from the team		
Performance-Based or Combination Instant Challenges	Benjamin with input from the team		
Who plays which role during the performance		X	Private voting

ACTIVITY 5: SPAGHETTI STRUCTURE REPRISE & IDEA GENERATING/FOCUSING

For this activity, you'll revisit "Spaghetti Structure" from your team's very first session. You'll guide your team through the creative process to discuss different ways to approach the Challenge. Then your team will solve "Spaghetti Structure" in a shortened timeframe. For an added level of complexity, you might consider giving the team a ping pong ball and a golf ball that has to be held at the top on of the structure at the end of time in order for the tower to receive score.

IDEA GENERATING

Have your team think of as many approaches to the Challenge as possible. This time, have the team members say their ideas out loud, and have one team member write every idea down (on a chalkboard, whiteboard, flip chart or on plain paper).

In this generating session, encourage the team to think of as many ideas as possible, and make sure they defer judgment. When generating ideas, there is no such thing as a bad idea.

When the team cannot generate any more ideas, have them vote on the most out-of-this-world idea of the bunch. Make this something for the team to aspire to in every idea generating session.

IDEA FOCUSING

Next, your team should focus the ideas down into workable solutions.

In this session, ask the team to verbalize what they think are the most promising ideas. Why are they promising? What about the other ideas makes them less promising?

REPRISE

When the team has finished generating ideas and focusing them, have them actually solve the Challenge, but only give them 3 minutes to build the structure. Score the Challenge.



PROCESSING

- Did the extra time help? Why?
- How can the team get better at using the creative process for Instant Challenges?
- How did the weight at the top of the structure affect the structure?
- How did putting a ball on top of the structure change the design?

ACTIVITY 6: LET'S HEAR IT

Have your team stand in a circle. Choose one team member to go first. That team member will say a word and then high-five the person on his or her right. The next person will say the first word that comes to mind after hearing the last word, and then will turn and high five the next person. The game continues around the circle as long as the team wants, provided they can remember all the words that have been said.

At some point, the Team Manager will shout, "Let's hear it!" Then the team will work its way from the current word back to the original word. We suggest having the movement of the game continue to the right, so team members have to remember what others have said.

Alternately, you can encourage the team to create a full sentence, one word at a time. Once the Team Manager shouts, "Let's hear it!" the next team member says the first word, and following team members try to work their way one word at a time through the whole sentence.

If your team masters the full sentence activity, you can try having them create an original story, one word at a time. For this activity, the team only has to work through the story one time. The goal will be to create an understandable story that lasts more than two sentences and has a beginning, middle and end. The Team Manager should supply a theme or made up story title.

SESSION 4: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

Mini-Challenge 1:

- 1 envelope
- 1 clothespin
- 1 binder clip
- 1 mailing label
- 2 straws
- 1 plastic egg

Mini-Challenge 2:

- 1 paper plate
- 1 rubber band
- 1 clothespin (reuse)
- 2 jumbo paper clips
- 3ft (90cm) of string

Mini-Challenge 3:

- 2 marbles
- 1 index card
- 3 straws
- 3 paper clips
- 1 plastic egg
- 2ft (60cm) of string

For other activities:

- Stopwatch/timer

PRINT COPIES

- print a copy of "Crossword Food"
- print two blank outlines for "Crossword Food"
- print a copy of "Mini-Challenge Blitz"
- print a copy of "Team Challenge Project Plan – Define Step"
- print two copies of the "Team Planning"

ACTIVITY 1: CROSSWORD FOOD

FOCUS: LOGIC, IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Your TASK is to fill in a crossword puzzle with words that are related to food and then present a PERFORMANCE in which words you have chosen belong together.

TIME

You will have up to 4 minutes to use your IMAGINATION to complete your TASK of filling in the crossword puzzle and plan your PERFORMANCE and up to 2 minutes to present your PERFORMANCE to the Appraisers.

PROCEDURE

The writers of a new puzzle book for kids have come to your team for help. They need one more puzzle to finish the book. They have the outline for the puzzle, but they need everyday words to fill the puzzle in. In order to fit with the rest of the puzzles in the book, they would like for all of the words to be related in some way to food. You should give one copy of your completed puzzle to the Appraisers, before you begin your PERFORMANCE.

MATERIALS

Your team will receive 2 blank outlines for the crossword puzzle. In addition, a piece of paper and a pencil will be available for your team to use as you prepare your PERFORMANCE.

SCORING

- A. 3 points (30 points maximum) for each food-related word that is put into the crossword puzzle.
- B. Up to 20 points for the creativity of how the words are related to food.
- C. Up to 30 points for the creativity of your PERFORMANCE
- D. Up to 20 points for how well your team works together.

FOR APPRAISERS

1. This Challenge does not specify that the words have to be in English.
2. If the team is misspelling a word, an Appraiser should say, "You have misspelled the word _____."
3. If the team is using a made-up word, an Appraiser should say, "You may only use everyday words."



PROCESSING QUESTIONS

- How was this Instant Challenge different from others?
- How did it encourage both generating and focusing ideas?
- What is the difference between the two?
- Which do you prefer and why?

TM Tip: Explain the difference between "generating" and "focusing."
Ask the team to give other examples of when they have seen each used.

ACTIVITY 2: MATERIALS MATTER

TYPES OF MATERIALS

The materials used in designing Instant Challenge solutions can usually be described as having properties that allow them to function in one or more of the following ways:

- Extenders: used to achieve length
- Connectors: used to fasten
- Controllers: used to contain, confine and carry

MAKE MATERIALS WORK

Take the time to encourage the team to discover ways to interact with common materials and better understand the materials' properties. Although many materials can easily fit into one type of function, virtually all the materials can function as an extender, connector and controller. This knowledge will not only help your team use materials for Instant Challenge solutions, but also look at items to repurpose them, or use them in unique and creative ways in your team's Team Challenge solution. For the following materials, as a team, come up with as many different uses as for each item as possible. Try to create at least 20. Uses may be as functional or as off-the-wall as you would like.

- Straw
- Paper clip
- Envelope
- Chenille sticks (pipe cleaners)
- Piece of paper
- Tape
- Labels

How might you use each of these materials as an extender, as a connector and as a controller?

THINK OF COMBINATIONS

- Two straws stuck together, one inside the other, can serve as a longer extender.
- A straw stuck into a piece of clay will stand erect to help build a tower.
- Using its own glue, an envelope can be stuck to a rolled piece of paper to create a device like a paper ladle.
- Looking at the materials used for the "Mini-Challenge Blitz," what are some other combinations that could help the team? Can the team combine items to create three extenders, three connectors and three controllers?

Extenders	Connectors	Controllers
1	1	1
2	2	2
3	3	3

ACTIVITY 3: MINI-CHALLENGE BLITZ

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

Use the team's energy from the first activity to move into this activity. This activity requires rapid-fire thinking and also invites the team to explore the physical properties of common Instant Challenge materials. First, simply go through the four Mini-Challenges in order. After the team has attempted all four, then go through the "Materials Matter" worksheet. If the team wants to—and if you have the time and materials—you can do the "Mini-Challenge Blitz" again. (You can also use it much later, to reinforce the lessons learned.)

MINI-CHALLENGE 1

Challenge: Create a device that will move an egg across a tabletop from one side to the next without falling. The team is only allowed to operate the device and may not directly touch the egg.

Time: 4 minutes

Materials: 1 envelope, 1 clothespin, 1 binder clip, 1 mailing label, 2 straws, 1 plastic egg

MINI-CHALLENGE 2

Challenge: Build a bridge between two chairs that will support the weight of the egg for 10 seconds.

Time: 4 minutes

Materials: 1 paper plate, 1 rubber band, 1 clothespin, 2 jumbo paper clips, 3ft (90cm) of string

MINI-CHALLENGE 3

Challenge: Build a tower that will raise the egg above the table as high as possible while holding two marbles.

Time: 4 minutes

Materials: 2 marbles, 1 index card, 3 straws, 3 paper clips, 1 plastic egg, 2ft (90cm) of string

MINI-CHALLENGE 4

Challenge: Tell the life story of the egg that underwent the first 3 Challenges, using only gestures. You may plan using words, but you must present non-verbally. Include the three other Mini-Challenges in the story.

Time: 4 minutes: 2 minutes to plan story with words, 2 minutes to present non-verbally



PROCESSING QUESTIONS

- How did your team delegate responsibilities?
- Was one person or were a few people really strong at building? Planning? Generating ideas? Focusing ideas?
- How did your team respond to the stress of doing multiple activities in a row?

ACTIVITY 4: PROJECT MANAGEMENT

The Project Management Institute Educational Foundation (PMIEF) is working with Destination Imagination to give team members tools and skills that will help them solve their Challenge now and help them handle any school or future work project. These tools will also help Team Managers run efficient team meetings and keep their teams on track. There are four steps (or Process Groups in PMI language) to successfully managing a project. We are using age-appropriate language to describe the steps, but will also list official terms used by the Project Management Institute (PMI) in parenthesis to familiarize you and your team with the official PMI language.

TM Tip: Encourage the team to follow the project management model and develop a project guide. Meeting the goals in the project guide helps the team see accomplishments and results, which will validate the planning, effort and work that go into each of the goals. The project guide also makes for a nice piece of documentation for the team when they reach the celebration stage. Meeting the goals in the project guide helps the team see accomplishments and results which will validate the planning, effort and work that go into each of the goals.

FOUR STEPS TO SUCCESSFULLY MANAGING A PROJECT:

DEFINE (INITIATING): This step is related to the Recognize Stage of the creative process. During this step, your team will work to determine team guidelines and expected behaviors, choose a Challenge, understand all elements of the Challenge, set goals for the overall project, determine meeting schedules, begin to learn to work together, and start to explore the roles and behaviors that are necessary for team success.

PLAN (PLANNING): During the Plan step, your team members will use their imaginations (the Imagine Stage of the creative process) to identify the tasks and mini-projects that need to be completed to solve their chosen Challenge. Once the team has a good understanding of the Challenge, they will be able to see how many tasks and mini-projects they need to undertake to successfully complete the Challenge.

For example: the team has decided to have a theme about the rainforest. They generate many ideas to make their set look like a rainforest. The team decides to build a waterfall with a pond and two types of trees found in the rainforest. As a team, they generate and then decide which elements are needed for each set piece (the team requirements) to look like a waterfall and trees. The team decides who is responsible for building those set pieces and the timeline for when they are to be done.

The team can use this process for each element of the Challenge. Once a plan is in place, the team will move to the Do step of Project Management.

TM Tip: You may find, especially with younger teams, that your team might do better to plan one part of the Challenge, move to the Do and Review steps, and finish that task before planning the next one. Planning the entire solution can take a lot of time and patience; some teams might need to take action on smaller projects to keep feeling motivated about their Challenge solution.

DO (EXECUTING AND MONITORING & CONTROLLING): During the Do step, teams will use the Initiate and Collaborate Stage of the creative process. Your team will spend most of its time in this step of Project Management. Team members will use the team-generated requirements from the Plan step and bring those ideas to life.

ACTIVITY 4: PROJECT MANAGEMENT (CONT'D)

REVIEW (CLOSING): As the team members work on their projects, they will check their work against their original plans (the Assess Stage of the creative process). Does the work meet the requirements of their Challenge and the requirements defined by the team in the Plan step? If it doesn't, the team should meet to discuss potential solutions or even decide to start over.

TM Tip: As the team members work on creating their solutions, they may find their initial ideas are more difficult than they realized. You can encourage them to keep working to create the team's original plan. Don't let the team give up because the task is difficult; remind them that they CAN do it. If, after trying many ideas, the team members working on the task or mini-project feel that they can't meet the original requirements planned by the team, have them meet with the entire team to re-plan the task.

TEAM CHALLENGE PROJECT PLAN

DEFINE

Below is a useful tool that was developed by the Project Management Institute Educational Foundation. It has been reproduced here for your team to use in the development of its Team Challenge solution. This tool can be used to define the plan for the overall production of the Team Challenge solution, and it can also be used to define what is needed for the development of individual components of the Challenge. Your Team Challenge is the Project.

If you would like to download and use more PMIEF tools, visit the website below and click on "Toolkit Materials."
<http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers>

PROJECT NAME (TEAM CHALLENGE TITLE):

A. Goals

1. Goals explain what will be achieved by the end of the project.
2. What is the question, problem, issue or perspective that is driving your project?
3. What is your goal?

B. Resources, Constraints, and Assumptions

1. Resources are all of the things that can be applied to help the project, which may include money, people's time, things you can trade for, or goods and services you own or can get for free. Name and describe the resources you have available.
2. Constraints are defined as things that limit what you can do in some way. Name and describe the constraints your project will have.
3. Assumptions are the things you know to be true about the project. What assumptions can you make as you begin your project?

C. Scope

1. Defining the scope determines what the project will and will not do; it establishes boundaries.
2. Things that are within the scope of the project (be sure to include the final presentation of results as part of your scope statement).
3. Things that are not within the scope of the project.

D. Deliverables and Dependencies

1. Deliverables: The products or results that are created through the course of the project, leading to the goal. In some cases, the goal and deliverable will be the same.
2. Dependencies: The relationships between the deliverables.

(Note: some projects may have only one deliverable and, therefore, no dependencies.)

FILL IN THE CHART BELOW TO INDICATE THE FOLLOWING:

- When the project is complete, what will your deliverables be?
- When you are working on the deliverables, what will their dependencies be?

#	DELIVERABLES	DEPENDENCIES

E. Establish Project Managers

Identifying project managers will help you manage all the parts of your project. Team members assigned to work as managers will have specific roles helping monitor and manage the project.

The Project Manager will be responsible for making sure the Team Challenge solution remains within the stated scope and give project updates to the rest of the team.

The Time Manager will be responsible for helping each team member remain on track and on schedule.

The Quality & Risk Manager will be responsible for helping team members identify possible challenges or stumbling blocks, and getting the supplies or other resources needed to help individual team members produce their deliverables or solutions with high quality. This team member will be responsible for making sure that the team is aware of all the potential risks associated with completing the Team Challenge solution. Some possible risks include: going over the stated budget for the chosen Team Challenge, accepting Interference from non-team members or not solving all the Team Challenge requirements before the day of the tournament.

The Communication Manager will be responsible for keeping track of the project materials and ensuring that the team members are communicating with each other.

WHO ON YOUR TEAM WILL FILL EACH OF THESE ROLES?

Project Manager: _____

Time Manager: _____

Quality & Risk Manager: _____

Communications Manager: _____

ACTIVITY 5: TEAM PLANNING

In this activity, your team will begin to assign roles, plan its course to a tournament, and also establish ground rules for collaboration. Have them follow the procedure, and allow plenty of time for discussion (and, of course, fun)!

TEAM ROLES

- Take some time to think about the role each person serves on the team. Are team members emerging as leaders, delegators, planners, writers, designers, project managers, time managers, quality and risk managers, or communication managers?
- How might team members best serve the team as it moves forward?
- Refer to the team roles section of Roadmap for a list of common team roles.

TEAM CALENDAR

- Using a calendar, help the team begin to plan its season.
- Are any big events on the horizon? Add birthdays, sporting matches, vacations and anything else your team can think of.
- What are some fun things that your team wants to do together? Have each team member think of an activity that the team can do for fun. Scatter these activities throughout the calendar to give the team fun events to look forward to. If a team member can't think of anything right now, the team can add placeholders (e.g., "Tim's Fun Day"). Just make sure the team member thinks of something fun and creative in time!
- Keep the calendar handy. Revisit the calendar when you begin working on your Team Challenge.
- Provide each team member with a copy of the calendar to take home and send updated calendars as adjustments are made.

TEAM GROUND RULES

- Often, it's important for teams to establish ground rules. Have the team take time to think of rules to follow when working together.
- Provide paper if they want to write their ideas down, and as they agree on rules, have a team member write them on the "Team Ground Rules" paper.
- Encourage open discussion. How should the team interact when discussing ideas for solutions? How should the team interact if conflict arises? How should the team make sure its collaboration is productive and positive? How should the team make sure they're having fun?
- Hang the team's ground rules for every team session. You can also copy the rules into Roadmap for your records.



TEAM GROUND RULES

- 1.
- 2.
- 3.

ACTIVITY 6: REFLECTION

Reflect on the creative process and how the team has progressed. Teams should begin to see how the process is cyclical and how looping back from assessment to previous stages helps to create better solutions.

Review all you've done in Roadmap. How is your team doing overall? What are the team's strengths at this point in the process? Where might the team improve?

Allot some time for your team to catch up before you moving forward. Here are some things to do if you haven't already done them:

Pick a Team Challenge. Before moving forward, the team members should agree on a Team Challenge to solve this season. If it hasn't already, the team should take time to further discuss the Challenges. Take note of the details of each Challenge, and if it helps, the team can also explore some ideas to get a feel for the types of solutions they can pursue.

Review Rules of the Road. It is very important for the team to have a clear idea of the program rules. There are also important forms and procedures that both the Team Manager and the team should review before the team digs into its Team Challenge solution.



USE THIS SPACE TO MAKE A FEW NOTES OR INCLUDE A PICTURE!

SESSION 5

GOALS

1. Start working on the Team Challenge
2. Continue learning the program
3. Continue reflecting on the process

This portion of Roadmap includes tools, Challenges and activities to help the team begin development of its Team Challenge solution. As the team progresses toward tournament season, make sure everyone continues to learn the rules, procedures and format of the Destination Imagination program. The team should be reminded that the quality of creative ideas is a product of the quantity of creative ideas. Also keep in mind that the Instant Challenges incorporated in this stage often require more materials than those in the first stage.

Continue to be encouraging and guide the team through the sessions. We invite you to document your team's progress in Roadmap, for your team can benefit later from having such a detailed record—both in regards to this program and for sentimental reasons.

Also, when provided, remember to take time and ask the team processing questions after activities and Instant Challenges. This important reflection time will make the Challenges more impactful for the team. All the learning moments that take place during your time together will be reinforced and, over time, the team will internalize this learning.

TM Tip: At this point on your team's journey, you may want to have the team start setting meeting goals for themselves. At the end of each meeting have the team assess what was accomplished and list specific things they would like to accomplish during the next meeting and make a list of supplies and materials that are needed for the next time. As you get closer to tournament, the team may need to decide to increase the length of their meetings or add extra meetings.

SESSION 5: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- set of markers
- 6 paper clips
- 4 mailing labels
- scissors
- 2 paper cups
- 24in (60cm) of string
- stack of plain white paper (about 15 sheets)
- 2 pieces of paper
- 4 plastic spoons
- 8 markers; 1 per color (green, red, blue, purple yellow, orange, black, brown)
- 16 chenille sticks; 2 per color (green, red, blue, purple yellow, orange, black, brown)
- 24 sheets paper; 3 per color (green, red, blue, purple yellow, orange, black, brown)
- pencils and pens
- 4 pencils
- 10 toothpicks
- stopwatch/timer
- 1 piece of foil
- 2 rubber bands
- tape measure
- 4 straws
- blackboard, whiteboard or flip chart

PRINT COPIES

- print a copy of "What's in the Kitchen?"
- print a copy of "Color Full"

ACTIVITY 1: WHAT'S IN THE KITCHEN?

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, IMPROVISATIONAL ACTING, THEATER ARTS, TEAMWORK

INSTANT CHALLENGE

Your TASK is to create 3 items which might be found in a kitchen and then present 2 PERFORMANCES for the Appraisers in which you demonstrate what has been created.

TIME

You will have up to 5 minutes to divide your team into two groups, for half of your team members to leave the room and for the other team members to carry out the TASK of creating 3 items which might be found in a kitchen and of planning the 1st PERFORMANCE. The team members who are left in the room will then have up to 1 minute to present the 1st PERFORMANCE. The team members who left the room will then return and have up to 1 minute to plan the 2nd PERFORMANCE and up to 1 minute to present the 2nd PERFORMANCE.

SETUP

There is a table with materials on it.

PROCEDURE

Part One (5 minutes): Half of your team members will leave the room with one of the Appraisers. This will be Group A. If there are an odd number of team members, you may decide whether the additional team member leaves the room. The remaining team members (Group B) should use the provided materials to create 3 items that might be found in a kitchen and should plan the 1st PERFORMANCE. The items that are created do not have to be real.

Part Two (1 minute): Group B will present a PERFORMANCE for the Appraisers in which they demonstrate what they have created.

Part Three (1 minute): Group A will return and will plan the 2nd PERFORMANCE in which they demonstrate what they think Group B has created. During Part Three, only Group A may talk and they may only talk to each other. Group B may not communicate with these team members in any way. It is not important that Group A correctly identify the items that Group B has made. Instead, Group A should develop their own creative ideas as to what the three items might represent.

Part Four (1 minute): Group A will present the 2nd PERFORMANCE.

ACTIVITY 1: WHAT'S IN THE KITCHEN? (CONT'D)

MATERIALS

- 10 toothpicks
- 4 plastic spoons
- 4 mailing labels
- 24in (60cm) of string
- 6 paper clips
- 2 paper cups
- 2 pieces of paper
- 4 pencils
- 1 piece of foil
- 4 straws
- 2 rubber bands

The mailing labels may NOT be attached to the floor.

SCORING

- A. Up to 20 points for how creatively you use the materials.
- B. Up to 10 points each (30 points maximum) for the creativity of the demonstrations of the kitchen items in the 1st PERFORMANCE.
- C. Up to 10 points each (30 points maximum) for the creativity of the demonstrations of the kitchen items in the 2nd PERFORMANCE.
- D. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- What kind of issues did your team encounter when you could not communicate?
- Did you need all of the provided materials? What other kinds of materials could you have substituted for the ones you actually used?

ACTIVITY 2: ABC BRAINSTORMING

“ABC Brainstorming” is a thinking tool that can help teams generate ideas. This technique is a good method to help a Team in the imagine stage of the creative process. By forcing teams to think differently than they would if thinking freely, thinking tools can help your team discover options they might not have generated, or select ideas they might not have considered.

In this ABC Brainstorming session, have the team draw the grid below on a blackboard, whiteboard or a flip chart. Then generate ideas that start with each letter. Try to address a simple problem, one to which the team is not particularly attached, so the team can work for fluency of ideas. For example, what are different functions that a chair might serve? How about a ballpoint pen? Strive for as many ideas as possible, and try to fill in every letter.

TM Tip: When your team is more comfortable with the technique, they can use this tool to generate ideas for the Team Challenge. Try having team members use this tool to determine a setting for their team story or for materials they can use to build their sets, props, costumes, or technical items.

Letter	Idea	Letter	Idea
A		N	
B		O	
C		P	
D		Q	
E		R	
F		S	
G		T	
H		U	
I		V	
J		W	
K		X	
L		Y	
M		Z	

ACTIVITY 3: COLOR-FULL

FOCUS: IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Your Challenge is to present a PERFORMANCE full of colors.

TIME

You will have up to 4 minutes to plan and practice your PERFORMANCE. You will then have 2 minutes to present your PERFORMANCE to the Appraisers.

THE SCENE

Color is everywhere but just not enough! Now is your opportunity to show the world how life can be full of color by presenting a PERFORMANCE filled with colors.

PROCEDURE

Part One (4 minutes): Create a story that is full of colors. You should choose 5 different colors and include each of these colors in some way in your skit. You may use the colored materials to help you.

Part Two (2 minutes): Present your skit. Be sure to include each of the five colors you have chosen in some way in your skit. Also make sure your PERFORMANCE has a beginning, a middle, and an end.

MATERIALS

The following materials will be available in 8 different colors:

- 1 marker
- 3 pieces of paper
- 2 chenille sticks (pipe cleaners)

A piece of paper and a pencil will be available for your team to use as you plan your PERFORMANCE.

SCORING

- A. 10 points if your PERFORMANCE has a beginning, a middle and an end.
- B. 10 points if you include at least 5 colors in your PERFORMANCE.
- C. Up to 8 points (40 points maximum) for how creatively you use each of the five colors in your PERFORMANCE.
- D. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- What other possibilities are there for the colors you chose?
- In what ways do we use color to identify?
- Why is color important to us?
- How has your teamwork changed since your first Instant Challenge? Have you defined team roles? Are you finding team roles to be helpful?

ACTIVITY 4: REFLECTING AND THE ROAD AHEAD

Your team will generate the ideas that will later be focused and applied toward your Team Challenge solution. To score well at a tournament, your team needs to get comfortable with the creative process and project management as it relates to Challenge solutions.

In the Instant Challenge portion of the program, your team will have minutes to develop a solution, without knowing beforehand what the Challenge will be.



REFLECTION

- How does the team incorporate the creative process in Instant Challenges for each solution?
- What are ways you might more effectively approach a Task-Based Challenge?
- How about a Performance-Based Challenge?
- How might you ensure that you are considering as many ideas as possible in a short timeframe?

In the Team Challenge portion of the Destination Imagination program, your team will have weeks to develop your solution before presenting it at a tournament.



REFLECTION

- What are ways your team can better employ idea generating and focusing in the long term?
- How might you better communicate to allow greater fluency of ideas?
- How might you encourage your soft-spoken team members to contribute?
- How can you better utilize the project management resources to help your team along the way?

Use this discussion to close the session, and write some of the team's discussion points below.

TM Tip: Remember, this session is focused on creating, incubating and researching ideas. Focus the team's creative energy to the Team Challenge and let team members discuss different approaches. Be sure to use thinking tools and project management resources to help the team with the process.

SESSION 6: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- a prize for “Race for Fluency”
- 1 zipper
- pens and pencils
- 1 paper plate
- markers
- 2 rubber bands
- stack of plain white paper (about 15 sheets)
- 1 binder clip
- stopwatch/timer
- 1 large button
- a roll of masking tape
- 12 in (30 cm) string
- 1 paper cup
- 1 sheet of newspaper
- 2 world maps with country names and large cities

PRINT COPIES

- print a copy of “World Tour”
- prepare the setup for “World Tour”
- prepare the setup for “Mix and Match”

ACTIVITY 1: RACE FOR FLUENCY

Start this session on a high-energy, creative note! First, split your team into two separate teams. Next, give each new team a few sheets of paper and a pencil.

Tell the new teams you will pose a problem, and then the teams will race to generate 30 ideas that could potentially solve the problem. The first team to hand a list of 30 ideas to the Team Manager wins a prize! (If you're worried about being fair, the prize can be as simple as bragging rights.)

When the teams are ready, ask: "How might you use a sheet of tin foil in a skit about a unicorn?" Remember: the goal is for teams to get used to creating as many ideas as possible. In idea generating, the team should not judge ideas, but rather record them for later consideration. Right now, each idea is simply an option.

Keep all of the team's ideas somewhere safe! You will reuse the list in the "About Focusing Ideas (or Critical Thinking)" activity.

- After the teams are finished, have them share their ideas.
- How many ideas were on both lists?
- How many were only on one team's list?
- How might you have used a thinking tool?
- What can your team take from this activity?

TM Tip: This is an exercise that is worth doing more than once. You could rearrange the teams and try again to see if they are able to get more ideas. Then bring the team members back together and have them work on ideas for their Team Challenge.

ACTIVITY 2: WORLD TOUR

FOCUS: INNOVATION AND DESIGN PROCESS, STRATEGIC PLANNING, EXPERIMENTATION, TEAMWORK

CHALLENGE

Your TASK is to create a non-verbal communication system to convey stops on a world tour.

TIME

You will have up to 4 minutes to divide into 2 groups, develop your non-verbal communication system and practice, and then up to 4 minutes to communicate the details of the tour.

SETUP

In the center of the room is a taped line. On one side of the taped line is a table with materials that can be used to communicate the names of stops on the tour. On the other side of the room is a 2nd table with a world map. On each table there is a list of possible stops on the world tour. Make sure that the teams cannot see the other team's list.

PROCEDURE

Part One (4 minutes): Divide your team into 2 groups. Each group will go to a different table. Develop a non-verbal communication system that will allow the group at the 1st table to communicate the names of stops on the tour. The 1st group may only use the materials on their table to communicate the stops. During this part of the Challenge, the 1st group will be given a practice world tour.

Part Two (4 minutes): Use your non-verbal communications system to help the 2nd group map out the world tour. The 1st group will be given the stops on the world tour to communicate. The stops must be communicated in order. The 2nd group should place a number on the country where they think the tour will be stopping, starting with 1 and continuing up to 10. During this part of the Challenge, no team member may talk or cross the taped line.

MATERIALS

- | | |
|---|---|
| <input type="checkbox"/> 1 paper cup | <input type="checkbox"/> 1 binder clip |
| <input type="checkbox"/> 1 zipper | <input type="checkbox"/> 1 button |
| <input type="checkbox"/> 1 paper plate | <input type="checkbox"/> 12in (30cm) string |
| <input type="checkbox"/> 2 rubber bands | <input type="checkbox"/> 1 sheet of newspaper |

The button and zipper may NOT be damaged.

NOTE FOR THE TEAM MANAGER: Make 2 different lists of 10 stops from the list of possible stops. One list will be for the team to practice in Part One, and the other will be for the team to present in Part Two. Provide two world maps with the possible stops highlighted.

ACTIVITY 2: WORLD TOUR (CONT'D)

SCORING

- A. 5 points (50 points maximum) for each stop successfully communicated in order in Part Two.
- B. Up to 30 points for the creativity of your communication system.
- C. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- Did you find the materials useful in developing your non-verbal communication system? How else could you have used them?
- How successful was your non-verbal communication system? Did you find yourself thinking in different ways without the use of words to convey your ideas?

POSSIBLE STOPS

NORTH AMERICA

- Acapulco, Mexico
- Anchorage, Alaska, USA
- New Orleans, Louisiana, USA

AFRICA

- Cairo, Egypt
- Johannesburg, South Africa
- Marrakesh, Morocco

MIDDLE EAST

- Jerusalem, Israel

SOUTH AMERICA

- Bogota, Columbia
- Lima, Peru

EUROPE

- Amsterdam, the Netherlands
- Dublin, Ireland
- London, England
- Paris, France
- Rome, Italy
- Oslo, Norway

ASIA

- Beijing, China
- Mumbai, India
- Tokyo, Japan

PACIFIC

- Christchurch, New Zealand
- Honolulu, Hawaii, USA
- Sydney, Australia

ACTIVITY 3: MIX AND MATCH

The Mix and Match tool, sometimes called “morphological analysis,” links ideas or attributes together in a random manner to generate numerous and original options. Using this tool, different attributes are generated in a number of columns. By randomly selecting one idea from each column, the team can generate hundreds of combinations that may inspire many varied new ideas to research and explore.

To start, get ten pieces of paper and number them sequentially from 1 to 10. To use the tool, draw a graph with five columns. The first column lists numbers from 1 to 10. The heading for each of the remaining four columns should be labeled with different categories for which the team wants to generate possibilities.

For today, have the team generate ideas for a possible storyline for a skit. Use the categories provided. Generate enough ideas to fill the column under each category. Afterward, randomly choose one number for each category by using the pieces of paper. By combining those four choices, your team will have generated a new idea for a storyline.

Try to revisit this tool as your team faces different problems. Adjust the columns, in number and category, as necessary. Later, you can use this tool to generate ideas for elements of your Team Challenge.

	Hero	Villain	Conflict	Setting	Humorous Twist
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

ACTIVITY 4: GENERATING IDEAS FOR THE TEAM CHALLENGE

The team now needs to start generating as many ideas as possible related to its chosen Team Challenge.

First, the team needs to revisit the basic requirements of the Challenge. A solid understanding of the Challenge is important before they generate ideas for a solution. Make sure the team writes the Points of Interest for the Team Challenge somewhere visible so team members can refer to them easily. It will also help the team to review any notes or team rewrites from previous sessions centered on understanding the Challenge.

Next, the team needs to generate ideas on ways to solve the Challenge. Generate ideas for each Point of Interest separately. The team can use simple brainstorming and other thinking tools as necessary. Again, the team should concentrate on fluency. Do not judge ideas. Simply record all ideas, so your team doesn't forget a potentially stellar option.

It is very important to promote an environment that encourages all types of thinking and respects every team member's voice. When individuals work well together, they are capable of much more than any single team member.

TM Tip: Remember to use the generating tools that have been provided in Roadmap to help your team members as they generate ideas for their Challenge solution. Your team should continue creating ideas until it can't generate any more. It's much better to have a large quantity of ideas when you move into the idea focusing stage. For the remainder of this Stage, we'll provide methods for the team to research and incubate ideas. The team should take this process seriously, but don't let them forget to have fun. Some Team Managers provide their teams incentives (e.g., snacks or prizes) for positive team interactions, off-the-wall ideas, or great performances. This encourages team members to be open and engaged.

ACTIVITY 5: WATCH PRESENTATION EXAMPLES

Your team may benefit from watching team Presentations from past tournaments to see how teams approach Challenges. You can find Presentations from past seasons that teams have posted on online video sites like YouTube. You can also go to the Destination Imagination YouTube channel for more videos at youtube.com/user/DIGlobalFinals.

TM Tip: Watching other team Presentations can help both new and old teams understand what may be expected of them at the tournament. When watching, make sure the team remembers the rules of Interference. Team Presentations should be viewed in a broad sense—what they look like, how the teams perform, what the Presentation Sites look like—rather than be viewed for the purpose of repurposing another team's ideas.



What did the team learn from watching Presentations?

SESSION 7: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 4 paper clips
- 4 straws
- 2 index cards
- 1 chenille stick (pipe cleaner)
- 4 mailing labels
- 8 toothpicks
- 1 pencil
- 1 sheet of paper
- 1 yardstick (meter stick)
- blackboard, whiteboard or flip chart
(If these are unavailable, plain paper may be used.)
- pens and pencils
- markers
- 1 stopwatch

PRINT COPIES

- print a copy of “Build-A-Story”
- print a copy of “Team Challenge Project Plan – Planning Step”
- consider providing Internet access for “Clarifications”

ACTIVITY 1: TITLES

To get this session started on a fun note, try this activity. So far, your team has finished a variety of activities and Instant Challenges, and it has also started to work on its Team Challenge. Each team member has undoubtedly contributed in some way or another. Here's a chance to acknowledge and poke fun at team member roles!

First, list all of the team members' names somewhere visible. Then have the team take time to think up titles for team members based on their roles on the team. Remember that sometimes team members serve different roles at different moments. For example, your titles could be "Drama Queen," "Stage Director," "Lead Engineer," "Playwright," "Resident Superhero" or "Class Clown!"

TM Tip: Make sure that everyone is included in this process, and use this as a chance for the team to bond and have some fun. If one team member has a title, then so should each of the other team members. Write down your team titles on a separate paper.

ACTIVITY 2: BUILD-A-STORY

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Your team is to present a PERFORMANCE in which you earn materials by including certain story elements in your skit. You will then carry out the TASK of building a freestanding tower that is as tall as possible from the materials you have earned.

For this Challenge, a "story element" is a list of possible things to include in your skit; "freestanding" means that your tower is NOT attached to anything.

TIME

You will have up to 3 minutes to plan and practice your PERFORMANCE, up to 2 minutes to present your PERFORMANCE to earn materials, and then up to 2 minutes to build your tower.

PROCEDURE

Part One (3 minutes): Plan and practice a skit that includes certain story elements. At the beginning of Part One, the Appraisers will give you a list of possible story elements and what materials you may earn by including each element in your PERFORMANCE. You should pick 3 of these elements to include in your skit.

Part Two (2 minute): Present your skit. Make sure your PERFORMANCE has a beginning, a middle, and an end. At the end of Part Two, the Appraisers will give you the materials you have earned.

Part Three (2 minute): Build a freestanding tower that is as tall as possible.

STORY ELEMENT	MATERIAL
Include a hero and a villain	4 Straws
Perform a dance	4 Paper Clips
Sing a song	2 Index Cards
Create entrance music for a character	1 Chenille Stick (Pipe Cleaner)
One character only speaks in rhyme	8 Toothpicks
One character acts as an animal	4 Mailing Labels

MATERIALS

In Part One, the Appraisers will give you a list showing what materials you can earn by including a certain story element in your skit. In Part Three, you will have a yardstick (meter stick), but his may NOT be damaged and may NOT be part of your tower. A piece of paper and a pencil will be available for your team to use as you plan and present your PERFORMANCE.

SCORING

- A. 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- B. 5 points (15 points maximum) for each story element you include in your PERFORMANCE.
- C. 1 point (30 points maximum) for each inch (2.5cm) of height of your tower at the end of Part Three.
- D. Up to 25 points for the creativity of your PERFORMANCE.
- E. Up to 20 points for how well your team works together.

For Appraisers Only: If the team includes more than 3 story elements in its skit, at the end of Part Two, it must choose which 3 sets of materials it wishes to receive.



PROCESSING QUESTIONS

- What were the strengths and weaknesses of the design of your tower?
- What did you use to make your tower tall? Did it work?
- How did your teamwork affect your team's design?

ACTIVITY 3: INQUIRY

After your team has generated as many ideas as possible, the team members should then choose their top three ideas and perform research/observation to learn more about each generated option. Research can give the team a better understanding of each idea, which can make the team more efficient when it starts focusing ideas down to the most viable options.

One of the strategy tools your team can use is the “K-W-L Chart.” This chart can serve as a graphic organizer to help organize, and document your team’s research efforts. First, use a large surface (e.g., a blackboard, whiteboard or flipchart) to list all the information known about the idea under K (Know) column. Then list all the questions the team has under the W (Want to Know) column. As the team gains information and learns new things, list all the facts in the L (Learned) column. Below is a sample chart.

Know	Want to Know	Learned

TM Tip: You may need to establish rules as the team begins to research information on its own. Rules of the Road features information regarding Internet safety. Keep the K-W-L Chart for future reference. For now, it can keep track of the types of knowledge the team needs to acquire. Later, you’ll find it details what the team has learned over the course of a season.

ACTIVITY 4: TEAM CHALLENGE PROJECT PLAN

PLANNING

Below is another useful tool that was developed by the Project Management Institute Educational Foundation. It has been reproduced here for your team to use when planning its Team Challenge solution. This tool can be used to plan for individual components of the team's Challenge solution and will help the team to define Challenge deliverables, measure success, plot out milestones and manage risks.

If you would like to download and use more PMIEF tools, visit the website below and click on "Toolkit Materials."

<http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers>

What deliverable are you planning with this document? Each deliverable will have its own planning documents. Your Team Challenge solution will have a number of deliverables, depending on the number of requirements for your chosen Challenge.

List the Deliverable: _____

Planning your project is an important step and will save time and frustration in the long run. Through the Planning step you are working through and solving problems before they come up. During planning, you will work through several important questions, helping you make decisions about how you will complete your Team Challenge solution as a team. The Quality & Risk Manager can help to ensure that the way the team measures success is aligned with the goal of completing the Team Challenge solution.

A. SUCCESS MEASURES

The method you will use to determine if you have been successful in meeting your Team Challenge deliverables.

What are your success measures? Examples may include: We built a vehicle that was reliable or we built a vehicle that could go back and forth across the Presentation Area 20 times.

B. SEQUENCING AND SCHEDULING

The Time Manager(s) should lead the development of the project schedule. The Project Manager(s) should have the final approval of the schedule. Often, a team will act as the Project Manager so as to not single any one person out.

Milestones are the points in a project's timeline that help you monitor if your project is staying on schedule. Completing a deliverable will always be a milestone, but there will often be other points leading to the deliverable that should also be named as milestones. Write your milestones as a statement of what you will have accomplished. You may have one or more milestones for each deliverable.

What are your milestones for this deliverable? Examples of milestones may be: "We decided that we would build a vehicle made of straws" or "we completed building our vehicle."

Milestone 1: _____

Milestone 2: _____

Milestone 3: _____

C. RESOURCES NEEDED

Resource planning means considering all the things that you will need to complete your Team Challenge solution. This might be money, space, supplies, or materials. Every DI Challenge, with the exception of the Improvisational Challenge, includes a budget limit. It is important that your team take time to consider where money and resources are spent so that you don't spend more than you have and that you don't use up the resources you have on things that do not pertain to the Team Challenge solution. The Quality & Risk Manager(s) can help to lead this. Different team members may require similar resources so it is important that the Communication Manager(s) helps individuals communicate and work together.

RESOURCE NEEDED (LIST EACH SEPARATELY)	HOW YOU WILL ACQUIRE IT

D. RISK MANAGEMENT PLAN

Managing risk means reducing the likelihood and/or impact of negative events. The Quality & Risk Manager should lead the development of the plan.

There are a number of different risks that you may want to consider when developing your Team Challenge solution. Some of those risks include spending more than your Challenge budget will allow, accepting non-team member Interference, not completing all your Team Challenge requirements before the tournament, etc. How will you manage the risks to the development of your Team Challenge solution and how might you prevent or fix them?

WHAT MIGHT GO WRONG?	Risk level L=Low M=Medium H=High	Area of Impact				HOW TO PREVENT IT OR FIX IT
		Resources	Timing	Scope	Quality	

ACTIVITY 5: CLARIFICATIONS

TEAM CLARIFICATIONS

As teams develop their solutions to the Team Challenges, they often run into sections of the Challenges that they find particularly unclear or don't understand at all. If your team runs into such a problem, it can ask for a Team Clarification. Take the time to make sure your team knows this process. If you have computer access for this session, you can even have them go online to see the process.

Your team may ask up to 10 questions of the International Challenge Masters (ICMs) for your Team Challenge. The ICMs will answer your team's questions and email the answers directly back to you. The question and answer will not be shared with any other team. The deadline to ask for Team Clarifications is February 15, 2017.

PUBLISHED CLARIFICATIONS

When the International Challenge Masters feel there is an issue about a Team Challenge or Rules of the Road that all teams should know about, they write a Published Clarification. A Published Clarification supersedes Rules of the Road and the Team Challenge, as well as a Team Clarification. Every team is expected to know the Published Clarifications for its Challenge.

Have you been checking for Challenge-specific Published Clarifications online? Does your team have a question about the Challenge that they need to have answered by an International Challenge Master? To check Published Clarifications or to ask for a Team Clarification, please visit DestinationImagination.org.

TO ASK FOR A TEAM CLARIFICATION

Visit the Destination Imagination website at DestinationImagination.org and follow instructions there to ask for a Team Clarification. All Team Clarifications are confidential between the team and International Challenge Masters. The team's ideas will not be shared with any other team. Keep in mind your team can only ask one question per Clarification request, and your team can only ask a total of 10 Clarification questions.

TM Tip: Make sure your team refers to the Challenge and Rules of the Road to look for an answer to their question before they ask for a Clarification. More information about the Clarification process is available in the Rules of the Road. Also make sure team members understand they can only ask ten Clarification questions in total.

SESSION 8: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 5 sheets of black craft foam
- 5 pairs of scissors
- 5 large craft sticks
- 10 mailing labels
- 1 pencil
- 1 sheet of paper
- pens and pencils
- markers
- stack of plain white paper (about 20 sheets)
- blackboard, whiteboard or flip chart (you can use plain paper in a pinch)
- stopwatch/timer

PRINT COPIES

- print a copy of "Silhouettes"
- print a copy of "Researching Together"

ACTIVITY 1: THREE THINGS

To get started for this Session, have team members take time to think about some of the activities they've done so far. At this point in the season, each team member has undoubtedly had an impact on the team in some way or another. Use this first activity to help them remember and acknowledge the positive strides the team has made.

First, give team members their own sheets of paper and writing utensils. Have each team member write his or her fellow team members' names somewhere on the paper, and write three positive things under each name. The three things can be funny moments, great ideas, positive qualities, surprising showcases of talent, or whatever else the team members want to highlight. Then have all of the team members share their items with the rest of the team. Collect and save these thoughts when the team begins to celebrate at the end of the season.

TM Tip: Taking time to acknowledge each other is an important part of becoming a great team. When conflicts arise, it can help the team to recall all of the shared experiences over the last few weeks. It can also help the team better define individual strengths and how to best apply them toward solutions.

ACTIVITY 2: SILHOUETTES

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, IMPROVISATIONAL ACTING, STORY DEVELOPMENT, THEATER ARTS, TEAMWORK

CHALLENGE

Your TASK is to create 5 silhouettes and then present a PERFORMANCE in which you use the silhouettes to tell a story. For this Challenge, a “silhouette” is the outline of something.

TIME

You will have up to 6 minutes to use your IMAGINATION to create 5 silhouettes and to plan and practice your PERFORMANCE, and then up to 2 minutes to present your PERFORMANCE to the Appraisers.

THE SCENE

Here’s a different version of a puppet show!

Part One (6 minutes): Use the materials on the table and the scissors to create 5 silhouettes. You may also plan and practice your PERFORMANCE during this part of the Challenge. Be sure your PERFORMANCE has a beginning, a middle, and an end.

Part Two (2 minutes): Present your PERFORMANCE.

MATERIALS

- 5 sheets of black craft foam
- 5 large craft sticks
- 10 mailing labels

Your team also will have 5 pairs of scissors, but these may NOT be used in your PERFORMANCE. In addition, your team will have a piece of paper and a pencil to use as you plan and present your PERFORMANCE.

SCORING

- 10 points if your PERFORMANCE has a beginning, a middle, and an end.
- Up to 10 points (50 points maximum) for the creativity of each of your silhouettes.
- Up to 20 points for the creativity of your PERFORMANCE.
- Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- What are some other solutions that your team could have come up with? Did you consider any other solutions or just stick with the first one you thought of?
- Did you try using a generating or focusing tool to help you come up with options?
- Did everyone contribute evenly to the solution? Were roles assigned to complete the solution? Do the same team members seem to be assuming the same roles for each Challenge?

As the team continues researching options together, it will become more important that they consider efficiency in their research. To help, the team can use the “What – Who – When – How (WWWH)” strategy tool. Your team can use this tool in tandem with the K-W-L Chart, but the team is not required to do so.

To use the WWWW tool, list items that the team wants to research in the “What” column. Team members then volunteer to research and learn about each item. The team member who volunteers for each “What” is listed in the “Who” column next to the item, and commits to a time when the research will be finished. All the team members then suggest ways to conduct the research in the “How.”

WHAT	WHO	WHEN	HOW

ACTIVITY 3: SOLUTION PLANNING

As stated in Session 3, Activity 4: Planning is the most important work the team members will do as they develop their solution. Planning can also be some of the most challenging work the team will do and most students are just beginning to develop their planning, time and project management skills. As a Team Manager, you will guide your team through the planning process. Planning involves using the Recognize, Imagine, Initiate, Collaborate, and Assess stages of the creative process in an intentional way. Below is another activity that the team can use in conjunction with the other provided project management tools to help them focus and plan their Team Challenge solution.

SOLUTION PLANNING CHART

Task Name: _____

Relates to which part of the Challenge: _____

Responsible Team Members: _____

Deadline: _____

REQUIREMENTS DEFINED BY THE CHALLENGE	REQUIREMENTS DEFINED BY THE TEAM

SOLUTION PLANNING CHART - example

Task Name: Evil Puppet

Relates to which part of the Challenge: Puppet Character

Responsible Team Members: Sarah and Kevin

Deadline: February 28, end of team meeting

REQUIREMENTS DEFINED BY THE CHALLENGE	REQUIREMENTS DEFINED BY THE TEAM
Puppet must be moved/managed directly by a team member	Must look like a crane prize machine
It can be any type of puppet	The crane must move
Must interact with a team member at some time during the Presentation	It has to look evil
	The puppet must be the size of an actual arcade crane machine
	It must have a coin slot that can be observed from the audience

ACTIVITY 4: REFLECTION

Allot some time for your team to catch up before you move into Session 9. Here are some things to consider:

- Review the activities you've done in Roadmap.
- How is your team doing overall? What are the team's strengths at this point in the process?
- Where might the team improve? Has your team been using and following the provided project management tools and activities?
- Are they adhering to the team ground rules and deadlines they have set?
- Ask the team members whether they are comfortable with the number of ideas they have generated in this session. They should have strived for fluency, and they should have more ideas than they know what to do with.
- Have they explored as many options as they can think of? Are there other ways to encourage different ideas?
- Have they spent time trying to generate ideas that seem crazy at first? The more focused the team is when entering the next sessions, the better.



USE THIS SPACE TO MAKE A FEW NOTES OR INCLUDE A PICTURE:

TM Tip: Review Rules of the Road. It is very important for the team to have a clear idea of the program rules. There are also important forms and procedures that both the Team Manager and the team should review as the team digs into its Team Challenge solution.

SESSION 9

GOALS

- Do or work on the Team Challenge solution
- Prepare for the tournament
- Register for your tournament

This portion of the Roadmap includes tools, Challenges and activities to help the team continue to develop its Team Challenge solution. In this session, your team will learn to focus its generated ideas into workable solutions. However, keep in mind that problem solving is a fluid process, and your team will constantly go back and forth between idea generating and idea focusing. As a matter of course, sessions for this and following stages will prescribe fewer activities: this is so the team can concentrate on its Team Challenge solution.

In this part of the process, your team may experience conflict. The act of focusing ideas requires judgment and selection, and team members sometimes have difficulty separating judgment of ideas from judgment of character. It is important for the team to process conflict as it happens: conflict can be an important part of becoming a team and an important part of becoming a team and creating a unique and interesting solution to the team's chosen Challenge. As the Team Manager, continue concentrating on the process and helping your team progress toward a tournament. To help, we've provided some activities and discussion points that focus on conflict. Your team can also utilize another helpful project management tool to keep them focused and on track to complete their Team Challenge solution by the tournament.

THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- | | |
|--|---|
| <input type="checkbox"/> 3 pieces of foil | <input type="checkbox"/> blackboard, whiteboard or flip chart (and something to write with) |
| <input type="checkbox"/> 2 pencils | <input type="checkbox"/> markers |
| <input type="checkbox"/> 2 index cards | <input type="checkbox"/> roll of masking tape |
| <input type="checkbox"/> 2 chenille sticks (pipe cleaners) | <input type="checkbox"/> stack of plain white paper (about 20 sheets) |
| <input type="checkbox"/> 12 6in (15cm) nails | <input type="checkbox"/> cardboard box (any type and size) |
| <input type="checkbox"/> 6 rubber bands | <input type="checkbox"/> tape measure |
| <input type="checkbox"/> 2 identical cans of food | <input type="checkbox"/> stopwatch/timer |
| <input type="checkbox"/> pencils and pens | |

PRINT COPIES & PREPARE FOR SETUP

- print a copy of "Exactly 3"
- review "Critical Thinking: The Process of Selecting an Option"
- find the team's list of ideas from "Race for Fluency"
- print a copy of "Choice Helper"

ACTIVITY 1: OTHER PEOPLE'S IDEAS

As part of the creative process, team members will need to learn to judge ideas in the best interest of the team. Use this activity to promote open discussion and consideration of ideas. First, place a cardboard box somewhere visible in front of the team. Then, ask the team to generate as many ideas as they can for how they might use the box in their Team Challenge solution. Each team member must generate at least three ideas.

After the team is done generating, have each team member select two favorite ideas from the list. Team members may not select their own ideas. They must say why they like the ideas they chose.



Why is it important for team members to compromise? What can they gain by making sure that everyone is involved? What are some ways they can make sure that everyone is heard? What are some ways they can voice their concerns if they don't feel they're being listened to? Write some ideas here!

TM Tip: If your team is having a particularly hard time with acknowledging other team members' ideas, consider creating your idea lists in one meeting, retyping/rewriting the list during the week, and then have the team use the list at the next meeting. Time can help the team to forget which ideas are from which team member.

ACTIVITY 2: EXACTLY 3

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

CHALLENGE

Your TASK is to build a bridge that will hold exactly 3 sets of weights.

TIME

You will have up to 6 minutes to build your bridge, and then up to 2 minutes to place weights for score.

SETUP

In the center of the room are 2 cans of vegetables. There is a table with materials and 6 sets of weights.

PROCEDURE

Part One (6 minutes): Use the materials on the table to build a bridge between the 2 cans of vegetables. The bridge may NOT be attached to the cans and may only touch the tops of the cans. Your bridge should be able to hold exactly 3 sets of weights. You may practice placing the weights in Part One. However, at the end of Part One, all the weights must be removed. **IMPORTANT:** You must have a bridge connecting the 2 cans by the end of Part One in order to proceed to Part Two. You will be warned when you have 1 minute remaining in Part One.

Part Two (2 minute): Place sets of weights 1 at a time for score. You may NOT touch the bridge when placing the sets of weights. In addition, each set of weights must be added in between the 2 cans and may only touch the bridge. You must wait 10 seconds between placing each set of weights. If your bridge does not collapse in Part Two, you must continue placing sets of weights until all 6 sets of weights have been placed.

MATERIALS

- 3 pieces of foil
- 2 pencils
- 2 index cards
- 2 chenille sticks (pipe cleaners)
- 6 sets of weights

The weights may NOT be damaged.

SCORING

- A. 20 points if your team has a bridge between the 2 cans at the end of Part One.
- B. Various points depending upon how many sets of weights your bridge holds: 40 points if your bridge holds 3 sets of weights; 10 points if your bridge holds 1, 2, 4, 5 or 6 sets of weights.
- C. Up to 20 points for creativity of your bridge.
- D. Up to 20 points for how well your team works together.

APPRAISER SETUP ONLY

The setup consists of two identical cans of vegetables set 12in (30cm) apart. There is also a table with materials and 6 sets of weights. The weights are 2 6in (15cm) nails connected by a rubber band. Pieces of tape should be put around the base of each can so that the cans may NOT be moved.



PROCESSING QUESTIONS

- Which of the materials were the most useful to span the distance? Which ones were the best to hold the weight?
- Did the place where you placed the weights make a difference? Would placing the weights closer to the cans be better than placing the weights in the middle?
- Do you think your approach was the best one to hold the correct amount of weight?
- If you practiced, how did this help? If you didn't practice, would it have helped to do so?

ACTIVITY 3: ABOUT FOCUSING IDEAS

In this activity, take time to review “Critical Thinking: The Process of Selecting an Option,” which can be found at the front of this document. It is important for the team to understand the general principles of idea focusing before they become active in that part of the process. After you have provided an overview of focusing ideas, have the team think of different ways they can take their generated ideas and focus them. Can the team think of five different ways to select ideas fairly and constructively?

Next, have the team split up into the same two teams from “Race for Fluency.” Then return their lists of ideas to each team. If you didn’t save the lists, have the teams complete a similar exercise by answering the question: “What are 30 different ways you could use a ballpoint pen in a skit about a school bus?” Ask each team to focus their ideas down to 5 workable solutions. Do not race for this part of the exercise.

TM Tip: By practicing on a list of ideas to which the team is not particularly attached, the team can learn to focus ideas. Allow them time to process the experience, and also make sure they discuss how to apply the lessons learned from this activity in the future.

ACTIVITY: 4: CHOICE HELPER

One way the team can choose ideas is by using "Choice Helper." Keep the same teams from the last activity, and concentrate on the same problem posed in the last activity. Give each team a few pieces of paper.

Choice Helper is a matrix that helps the team to assess ideas according to factors the team members consider important. Choice Helper allows the team to narrow its choices and to evaluate options in an orderly manner.

1. To use the matrix, the team first lists ideas down the left side of the matrix. For example, if a team has five different options for a prop to make, it would list the five options on the left side of the matrix.
2. Then the team lists criteria across the top of the matrix that are important in choosing the best ideas. Using the same example, the team might decide that low cost, easily available materials, needed skills, building time and uniqueness are the criteria it will use to judge each prop. (Use these criteria, or have the teams make up their own.)
3. The team then assigns a ranking scale with which they can assess each option for each criterion (e.g., 1=fair, 3=average, 5=great).
4. Each team member should be given his or her own sheet of paper and writing utensil to rank each option.
5. Then the team should consider each idea, one at a time. Each team member will work down each column to rank each option for the same criterion. Then they should go to the next criterion. (Doing it this way will reduce the possibility that a team member will be affected by how others ranked criteria.)
6. When each team member has ranked the options for each criterion, the points are averaged. The results can direct the team's discussion until they can come to an orderly and well-considered decision.

Option	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Average
1.						
2.						
3.						
4.						
5.						

TM Tip: Make sure the team understands how to use this tool, and also encourage them to return to the tool in the future.

SESSION 10

THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- stack of plain white paper (about 20 sheets)
- pencils and pens

PRINT COPIES

- print a copy of “Team Challenge Project Plan – Doing Step”

ACTIVITY 1: FAVORITE TV SHOW

For a quick energizer, ask the team to pick its favorite television show. Then have them work together to perform an episode of the show. The team can either perform its favorite episode, or write its own. Encourage the team to incorporate humor into the performance, and make sure everyone plays a different part.

ACTIVITY 2: CONFLICT

Your team will experience conflict as it works toward a solution. Conflict is often a necessary step toward progress. Therefore, it is important for your team to learn how to deal with conflict as it arises. As a Team Manager, remember to play the role of facilitator. You should help the team process conflict as it happens, but you should avoid making decisions and judgments for the team. In other words, stay out of the conflict as much as possible: your team will thank you later. For more on conflict, please refer to the team development section of Roadmap for a description of the 5 stages of team development.

In their book “Getting to Yes: Negotiating Agreement Without Giving In,” authors Roger Fisher and William Ury break down conflicts into three components:

- The Issue: the point, subject or matter of discussion, debate or dispute
- The Positions: where people stand in relation to the issue
- The Interests: the underlying concerns, needs or desires

When team members are at a standstill due to conflict, ask them to define and divide the conflict into the three components where everyone can see. The issue and the positions are typically easy for team members to fill in, but they often have trouble with understanding their underlying interests. The act of writing these components can help the team step away from the emotion and get to the reasons for the emotion. In these instances, you can facilitate as necessary. The team needs to learn to discuss their reasoning until the team can come to a collaborative resolution.

For example, if a team is fighting about incorporating a superhero into a skit, the conflict may break down like this:

- The Issue: Should we include a superhero in our skit?
- The Positions: Tim thinks a superhero would be a pointless addition to the skit. Steve thinks a superhero would be an awesome addition to the skit.
- The Interests: Tim doesn’t want to confuse the audience and likes the story already. Steve wants to be more involved in the performance, and if he played a superhero, it would command attention.

In this instance, as in most conflicts, the interests of each side were unclear. Try this exercise with your team to help resolve conflict when it arises.

TM Tip: If your team is really struggling with an issue, sometimes a quick physical activity will help them get unstuck. If the conflict is becoming a distraction, table the issue until the next meeting and do something fun together.

ACTIVITY: 3: TEAM CHALLENGE PROJECT PLAN

DOING

Below is another useful tool that was developed by the Project Management Institute Educational Foundation. It has been reproduced here for your team to use when working on its Team Challenge solution.

The tool below can be used to help your team members as they divide the responsibilities for the deliverables of their Team Challenge solution among themselves. If you would like to download and use more PMIEF tools, visit the website below and click on "Toolkit Materials."

<http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers>

A. TEAM RESPONSIBILITIES

Review your activities and tasks and determine how you will assign team members. As you agree on responsibilities, you should consider which activities are happening at the same time and in an order, so that the work is distributed evenly across the amount of hours and number of people you have on your team.

TEAM MEMBER	LEAD ON ACTIVITY #	ASSIST ON ACTIVITY #

B. MONITOR AND CONTROL PROCESS

Monitoring and controlling can help your team stay engaged throughout the Doing step. Through monitoring and controlling your progress, they can ensure that they are staying on time, on budget and are creating solutions that are of high quality. To monitor and control in the most effective way, the team members should continually update each other on the progress made toward completing individual activities. This can include keeping an up-to-date inventory of materials and revising the overall Team Challenge Project Plan as needed.

ACTIVITY 4: WORK ON THE TEAM CHALLENGE

At this point, it's important for the team to focus its attention on the Team Challenge. As there's no guarantee everyone can be available to be together, take advantage of scheduled team sessions and let the team work on its Team Challenge solution. Allow the team to work on its own, but also facilitate as necessary.



REFLECTION

- Has the team made progress toward a solution?
- What skills are required for the team to proceed?
- Does the team need to return to idea generation to have more ideas to work with?

Session 11: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 5 sheets of colored paper
- 1 egg carton
- 7 chenille sticks (pipe cleaners)
- 2 boxes
- 1 sheet of foil
- markers
- 5 toothpicks
- 1 rag
- pencils and pens
- roll of masking tape
- stack of plain white paper (about 20 sheets)
- stopwatch/timer

PRINT COPIES

- print a copy of the "Paired Choice Analysis Form" for each team member
- print a copy of "Time and Place - Global Competency Mini-Challenge"

ACTIVITY: 1: STRANDED

Use this activity to kick start the team's performance skills. The premise is simple: a snowstorm has trapped office workers (i.e., your team) in their office (i.e., the team's meeting room) for the weekend. Using the materials that are typically found in the room, how will the office workers survive the weekend? Your team will have up to 4 minutes to plan and prepare a performance about the weekend, and 2 minutes to perform.

Crisis often calls for drastic measures and innovation. However, crisis isn't a necessary element of innovation. If your team can learn to view Challenges as opportunities for creativity and fun, then they'll become successful problem solvers. How can the team work to make problem solving more fun? Use this space to write the team's suggestions!

ACTIVITY 2: PAIRED CHOICE ANALYSIS

Another tool your team can use to focus ideas is the “Paired Choice Analysis (PCA)” tool. This tool is particularly useful when the team has a small number of appealing options and wants to select the most promising one. The tool asks team members to compare and rate each option against every other option. Because the PCA tool also asks team members to number the strength of their preferences, the tool effectively ranks the team’s options in order of preference.

For this activity, hand each team member a copy of the form and follow the instructions to run the team through how to use the tool. To see how the PCA tool works, ask the team to generate six ideas for main characters in a short skit about a fictional election. Go quickly, and don’t put too much emphasis on idea generation. Then ask the team members to fill out their forms using those six options.



Where could your team have used this in the past? Where can the team use this tool in the future?

TM Tip: The PCA tool can help your team if it has a small number of options and can’t choose one to pursue. The individual nature of the ranking process also allows each team member to weigh in on the decision. Additionally, the PCA tool can be changed to suit the team’s needs. The team can increase or lessen the number of options.

PAIRED CHOICE ANALYSIS FORM

1. First, list your options here:

Option A: _____

Option B: _____

Option C: _____

Option D: _____

2. Next, for each pair below, circle the option you prefer, and enter a number in the "Value" column to indicate how strongly you feel about your choice. (3=very strongly prefer, 2=moderately prefer, 1=slightly prefer)

Option	Value	Option	Value	Option	Value
A/B		A/C		A/D	
		B/C		B/D	
				C/D	

3. Add up each team member's option total score, and then add them all together. Total Scores for:

Option A ____

Option B ____

Option C ____

Option D ____

4. Then rank the results! Our top choice: _____

2nd choice: _____

3rd choice: _____

4th choice: _____

ACTIVITY 3: TIME AND PLACE: GLOBAL COMPETENCY MINI-CHALLENGE

CHALLENGE

Create a presentation about a specific date in history.

TIME

You will have up to 1 hour to create and practice your presentation. You will have 4 minutes to perform your presentation for score.

THE SCENE

There are many important dates and times in history around the world. For example, on December 17, 1903 the Wright brothers flew the first successful airplane flight, on November 9, 1989 the Berlin Wall fell, on October 10, 1964 the summer Olympics opened in Tokyo, Japan—the first time the Olympics were held in Asia. In this Challenge, research important dates in countries other than your own. Choose one, then use your imagination to picture your team in that place on that specific date in history. Create a skit that creatively tells the Appraisers what happened in that place on that day. Be sure to include where you are and why your date is important.

MATERIALS

- 5 sheets of colored paper
- 1 egg carton
- 7 pipe cleaners (pipe cleaners)
- 2 boxes (any size)
- 1 sheet of foil
- markers
- toothpicks
- 1 rag (any size and color)

SCORING

- A. Up to 20 points for the creativity of your presentation.
- B. Up to 20 points the portrayal of the country.
- C. Up to 30 points for the creativity of the portrayal of what happened on your selected date.
- D. Up to 10 points for your creative use of materials.
- E. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- Why did you choose the country and date you chose to portray?
- How did you research your country and event? What did you learn about researching things for Challenges?
- Did you learn anything about the country that you didn't know before?
- What are the differences between a Mini-Challenge and an Instant Challenge?

ACTIVITY 4: REFLECTION AND WORK ON YOUR TEAM CHALLENGE

Allow the team time to work on its Team Challenge solution, and facilitate as necessary.



Here are some points for the team to consider:

- Check your team calendar. Are you on track? Have things changed? Should you adjust your time lines or set new deadlines? Have you done any of the fun things you thought of earlier?
- Can you think of your ideal solution? What are ways your team can achieve that ideal solution?
- Has your team revisited the integration of Team Choice Elements into the Team Challenge?
- Have you checked the Published Clarifications? Have Clarifications changed your team's approach in any way?

TM Tip: Don't worry if your team isn't as far along as you would like them to be. Remember: the value of this DI educational experience lies in the way it allows teams to solve Challenges on their own. Continue to encourage the team but remember that each team operates in its own way!

SESSION 12: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- markers
- 3 rubber bands
- stack of plain white paper (about 20 sheets)
- 3 pieces of paper
- pencils and pens
- 2 paper cups
- stopwatch/timer
- 8 mailing labels
- masking tape
- 4 paper clips
- 1 spoon
- 3 Ping-Pong balls
- 1 pair of chopsticks (or pencils)

PRINT COPIES AND PREPARE FOR SETUP

- print a copy of “Ice Cream Sundae”
- be aware of the setup required for “Ice Cream Sundae”

ACTIVITY 1: BEING A GOOD SPORT

This game requires at least 2 athletes, 2 judges, a host and a co-host. The first host gets an everyday activity from the Team Manager and that becomes the sport that the “athletes” will be attempting. An example of an everyday activity would be dishwashing or shoe tying. The host speaks with the athletes for a minute and then allows the athletes to begin to warm up.

While the athletes are warming up, the host will throw the commentary over to the co-host who will be joined by an expert. They will talk for a minute and then a team member will act as a buzzer, which means the competition has begun. The athletes then pantomime doing the everyday activity in a very physical, intense and often, a ridiculous way. Once the buzzer ends the period, the athletes debrief with the host and then receive scores from judges.

TM Tip: You may rearrange the roles of team members based on what you wish to accomplish. For example, if you believe the team needs work on communication, it might be useful to have multiple athletes competing and pantomiming in different ways while the commentators remark on various things going on in the scene. You can also create new roles, such as a coach, to enhance the scene.

ACTIVITY 2: ICE CREAM SUNDAE

FOCUS: INNOVATION AND DESIGN PROCESS, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

CHALLENGE

Your team is making an ice cream sundae. To do this it needs to get the scoops of ice cream from the carton to the bowl. Your TASK is to create a device to launch the ice cream (Ping-Pong balls), and to create a way to keep the balls in the bowl after they have been received.

TIME

Your team will have up to 4 minutes to create a device to launch Ping-Pong balls, and then up to 2 minutes to use the device to move Ping-Pong balls for score.

SETUP

On the ground are two 1ft x 1ft (30cm x 30cm) taped areas (A & B) spaced 5ft (1.5m) apart from one another. One represents the ice cream carton and the other is the bowl for the ice cream sundae.

PROCEDURE

Part One (4 minutes): Your team will design and build a launching device to move Ping-Pong balls from square A to square B. You should also build a way to catch the balls in square B. You may use this time to test your device.

Part Two (2 minutes): Your team will transport Ping-Pong balls for score. You will be scored on how many Ping-Pong balls are successfully launched from square A and captured in square B. Your team may not touch the Ping-Pong balls to guide them after they are launched. If the balls are not captured in square B, however, you may bring them back to square A to be relaunched. You may continue building in Part 2, but you cannot launch until you are finished building your device and capturing method.

MATERIALS

- | | | |
|--|--|--|
| <input type="checkbox"/> 1 spoon | <input type="checkbox"/> 3 rubber bands | <input type="checkbox"/> 8 mailing labels |
| <input type="checkbox"/> 1 pair of chopsticks (or pencils) | <input type="checkbox"/> 2 paper cups | <input type="checkbox"/> 4 paper clips |
| | <input type="checkbox"/> 3 pieces of paper | <input type="checkbox"/> 3 Ping-Pong balls |

SCORING

- 20 points (60 points maximum) for every Ping-Pong ball that is launched from square A and captured inside square B.
- Up to 20 points for the creativity of your launching device and capturing method.
- Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- What approach did your team use to launch the Ping-Pong balls? What are some other approaches that could have worked as well?
- How did you ensure that your Ping-Pong balls would land and remain in square B?
- Did your team try something new and unexpected? Did you stick to methods and uses for materials that you knew worked? What are the advantages and disadvantages of both strategies?

ACTIVITY 3: WORK ON YOUR TEAM CHALLENGE



Again, give your team time to work on its Team Challenge solution. Facilitate as necessary. Here are some points to consider:

- Has your team experienced conflict? What are ways that you can work out conflict when it arises in the future? Can you think of safe words, phrases or activities that would help break the tension so they can focus on the problem?
- What are your team's top priorities?
- Does your team need to acquire any new skills? What are ways to learn the skills needed?

TM Tip: Remember your Interference contracts! Destination Imagination's Interference policy is very important as the team continues to develop its Team Challenge solution. Make sure to facilitate your team's needs, but do not suggest or offer solutions.

ACTIVITY 4: UPKEEP

Allot some time for your team to catch up before you move ahead. Here are some things to do if you haven't already done them:

- Review the activities you've done in Roadmap. How is your team doing overall? What are the team's strengths at this point in the process? Where might the team improve?
- Is the team effectively directing its ideas into solutions? Can you think of ways to improve this process? It's important to remember that problem solving is a fluid process. Can you think of an instance when your team benefitted from returning to idea generation?
- Review Rules of the Road. Is your team prepared for a tournament? Have you also revisited Published Clarifications to make sure your solution fits within the guidelines of the Team Challenge?



CONGRATULATIONS ON THE PROGRESS! WRITE ANY NOTES OR PASTE A PICTURE IN THIS SPACE:

TM Tip: As a Team Manager, it is your responsibility to register your team for the tournament. Each Region and Affiliate has different registration procedures, so you will need to get in touch with a Tournament Director to make sure your team is ready and scheduled for the tournament. Your Affiliate Director can direct you to the right contact person. A full list of Affiliate Directors is available at DestinationImagination.org.

SESSION 13

GOALS

- Do your homework
- Inform parents

This portion of Roadmap is less prescriptive than in earlier sessions. At this point, your team should be directed on its Team Challenge and preparing for its Presentation at a tournament. As you near tournament time, it's important to remember to let the teamwork at its own pace. Each team operates differently. Help your team practice and prepare, and remind team members of important deadlines. Also keep in mind that your team may need to do some fundraising to help alleviate travel costs.

THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 1 sheet of paper
- 1 piece of foil
- 4 paper clips
- 2 twist ties
- 3 straws
- 1 yardstick
- 3 pencils
- 2 identical cans of food
- 3 chenille sticks (pipe cleaners)
- 4 mailing labels
- masking tape
- stopwatch/timer
- 2 cards (tower and bridge)

PRINT COPIES AND PREPARE FOR SETUP

- print a copy of "Tower or Bridge"

ACTIVITY 1: SCORE CHECK

In this stage, your team should be working toward finishing its Team Challenge solution. Team members at this point in the process typically juggle many roles, ideas and responsibilities, and they may feel the stress of the upcoming tournament.

To keep the team on point, ask the team to take time to review the score breakdown of its chosen Team Challenge. Is the team focusing on earning the highest score possible? If not, what elements could use stronger or weaker emphasis? If the team had to finish its solution by tomorrow, on what would it direct most of its energy?

TM Tip: It's important for the team to remember how the Appraisers will award scores. By reviewing the score breakdown of the Challenge, the team can better determine how to spend its time and energy. This lesson applies to Instant Challenges too.

PLAN CHECK

Your team should be checking its plan regularly. Are the team's tasks and mini-projects being completed as the team planned? Are the requirements of the Challenge and the team requirements being fulfilled? What can be finished within the remaining time and what might need to be simplified or left incomplete?

ACTIVITY 2: WORK ON YOUR TEAM CHALLENGE



Before the team begins work on its Team Challenge in this session, have team members talk about the progress they've made so far. Do the team members remember their first sessions together? How have they changed since then? What moments do team members remember most?

Take the time to discuss the future. What do team members think will be the biggest obstacles between now and a tournament? What are ways that the team can attack those obstacles, or bypass them? What does each team member hope to accomplish by the end of the season?

Also, make sure your team considers travel. Can your team's materials and props fit into a car, truck or van? How can elements be adjusted to make travel easier?

ACTIVITY 3: TOWER OR BRIDGE?

FOCUS: INNOVATION AND DESIGN PROCESS, STRATEGIC PLANNING, EXPERIMENTATION, TECHNICAL DESIGN AND CONSTRUCTION, TEAMWORK

CHALLENGE

Your TASK is to build a structure that will either be used as a tower or a bridge.

TIME

You will have up to 5 minutes to build a structure and then up to 2 minutes to turn your structure into a tower or bridge.

SETUP

In the center of the room is a table with materials, as well as two cans of vegetables and a taped area.

PROCEDURE

Part One (5 minutes): Use the materials to build a structure. At the end of Part One, one of your team members will choose a card that will tell whether your structure will be a tower or a bridge.

Part Two (2 minutes):

- If your structure is a bridge, it must span a gap between the 2 cans of food before time ends. You may move the cans to change the distance that the bridge spans. Your bridge may only touch the tops of the cans.
- If your structure is a tower, it must be within the taped square before time ends. The blocks may NOT be part of your tower.

You may alter your structure at any time in Part Two. You may also switch cards, but doing so will cost your team points. When time ends, an Appraiser will measure the structure. No team member may be touching your structure when it is being measured.

MATERIALS

- | | | |
|---|--|---|
| <input type="checkbox"/> sheet of paper | <input type="checkbox"/> 3 chenille sticks (pipe cleaners) | <input type="checkbox"/> 2 twist ties |
| <input type="checkbox"/> 4 paper clips | <input type="checkbox"/> 4 mailing labels | <input type="checkbox"/> 1 yardstick |
| <input type="checkbox"/> 3 straws | <input type="checkbox"/> 1 piece of foil | <input type="checkbox"/> 2 cans of food |
| <input type="checkbox"/> 3 pencils | | |

The yardstick and the cans may NOT be damaged. The ruler may NOT be part of the structure. The mailing labels may NOT be attached to the cans or the table.

FOR APPRAISERS ONLY: The setup consists of a table with materials, two identical cans of food and a 12in x12in (30cm x 30cm) taped area.

SCORING

- A. 10 points if your team does NOT switch cards.
- B. 1 point (40 points maximum) for each inch (2.5cm) of height of your tower or 2 points (40 points maximum) for each inch (2.5cm) spanned by your bridge.
- C. Up to 30 points for the creativity of structure.
- D. Up to 20 points for how well your team works together.

**PROCESSING QUESTIONS**

- Do you think a tower or a bridge is more difficult to build? Why?
- How did your team make the decision to build a tower or a bridge? Would you choose differently if you were to try this Challenge again? Why or why not?

SESSION 14: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 7 craft sticks
- 5 sheets of newspaper
- 6 index cards
- 5 mailing labels
- 4 plastic cups (16oz)
- markers
- 6 pencils
- stack of plain white paper (about 10 sheets)
- 10 straws
- pencils and pens
- 5 plastic spoons
- stopwatch/timer

PRINT COPIES AND PREPARE FOR SETUP

- download and print the Travel Guide for Teams at DestinationImagination.org (available after January 20, 2017)
- print a copy of the Tournament Data Form(s) found at the end of the team's chosen Team Challenge
- print a copy of the Declaration of Independence found near the end of Rules of the Road
- print a copy of the Expense Report found near the end of Rules of the Road
- print a copy of "Just a Game"

ACTIVITY 1: THE FOLEY OF MAN

A Foley artist is the person who makes sound effects for movies. Today, your team is going to try your hands at being Foley artists!

The team must separate into two groups: the Foley artists and the actors. Take a few minutes to plan and practice a short performance that incorporates at least 4 sound effects. The subject matter isn't important as long as the performance has a beginning, middle and end. Your Foley artists can use the materials around the room to help make their sound effects. If you want to, reverse roles and try again!

TM Tip: Take some time to get comfortable with performances. Your team won't know the type of Instant Challenge it will face at the tournament. They'll also have to present your solution to a live audience. Have them work to learn the rhythms of working with their teammates, and build trust in improvisation and presentation!

ACTIVITY: 2: WORK ON THE TEAM CHALLENGE

As you near the tournament, make sure the team continues to work on the Team Challenge. Between now and the tournament, your team will likely feel a time crunch. Make sure they stay directed on the tasks that the team needs to accomplish, and make sure they practice and develop their Presentation. Make it a regular practice to have the team set goals for the meeting; outlining their plans for each meeting can help them stay on task.



Is your team's calendar up to date? How long does your team have to finalize the Team Challenge solution? Make any necessary adjustments and be sure they work together to accomplish their goals!

ACTIVITY 3: JUST A GAME

CHALLENGE

Your team is to present a PERFORMANCE in which you create and demonstrate 2 new games using the materials.

TIME

You will have up to 5 minutes to divide your team into 2 groups and create 2 new games. Your team will then present PERFORMANCES in which each group will have 2 minutes to explain their game and have their teammates play it.

THE SCENE

Part One (5 minutes): Divide your team into 2 groups. Each group should go to one of the tables and use the materials on that table to create a new game. Each game must involve the players using at least 3 of the materials on the table to complete a certain goal. During Part One, team members must remain at their own tables and may only talk to members of their group.

Part Two (2 minutes): Game time for the 1st group. One of the groups will explain the rules of their game and have their team members in the opposite group use the materials to try to complete the goal of the game. You will be scored on the creativity of the use of the materials and the goal of the game, not on whether your team members are able to complete the goal.

Part Three (2 minutes): Game time for the 2nd group.

MATERIALS

- | | |
|--|--|
| <input type="checkbox"/> 7 craft sticks | <input type="checkbox"/> 10 straws |
| <input type="checkbox"/> 6 index cards | <input type="checkbox"/> 5 plastic spoons |
| <input type="checkbox"/> 4 plastic cups (16oz) | <input type="checkbox"/> 5 sheets of newspaper |
| <input type="checkbox"/> 6 pencils | <input type="checkbox"/> 5 mailing labels |

SCORING

- A. Up to 15 points each (30 points maximum) for the creativity of each of the games.
- B. Up to 15 points each (30 points maximum) for how creatively the materials are used in each of the games.
- C. Up to 10 points (20 points maximum) for the creativity of each of the PERFORMANCES.
- D. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- Was it more difficult to work without your whole team participating?
- Was it fun playing your games?
- Did you find making up a game different from just playing a game? What were the differences?
- Did having so many materials make it easier or more difficult to build a game around them?

ACTIVITY 4: REVIEW THE TRAVEL GUIDE FOR TEAMS

The Travel Guide for Teams is a resource published annually to help teams prepare for tournaments. It is made available in January and can be downloaded from the Destination Imagination website. The Travel Guide for Teams provides information about Tournament Officials, lists Challenge site procedures and offers sample scoring rubrics. It also provides information related to keeping your team supporters informed.

TM Tip: It's important you understand the procedures of your tournament before you arrive. What is the check-in procedure for your Team Challenge? What is the check-in procedure for Instant Challenge?

ACTIVITY 5: FILL OUT PAPERWORK

Your team will need to prepare and bring copies of all required forms for the tournament. At every tournament level, you will need hard copies of the following forms:

- Tournament Data Form (five copies): A three-page form found at the end of your chosen Team Challenge.
- Declaration of Independence (two copies): Your tournament will require two copies of this form. It can be found near the end of Rules of the Road.
- Expense Report (one copy): This report verifies the cost of your Team Challenge solution. It can be found near the end of Rules of the Road. (Note: This form is not required for the Improvisational Challenge.)

Take some time to have the team fill out the forms, make copies and keep them in a safe place where you'll remember them! If the team is not able to fill out the details entirely, add a date to your team calendar to remind you to fill them out. For Elementary Level teams only, Team Managers may fill out the form, writing out the words dictated by the team.

Interactive tournament forms are available for download at DestinationImagination.org. After your team has decided on what it will include on each form, they or you can enter that information into the interactive form and print it. This will ensure that Tournament Officials can read your information, and it will make their job much easier!

SESSION 15: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 1 sheet of newspaper
- 1 plastic cup (16oz)
- 6 straws
- 4 pipe cleaners
- 4 craft sticks
- 6 paper clips
- 4 mailing labels
- 3 rubber bands
- 2 pencils
- scissors
- water (16oz)
- stack of plain white paper (about 10 sheets)
- markers
- pencils and pens
- stopwatch/timer

PRINT COPIES

- print a copy of "Water Tower"
- review the rules of Interference (in Rules of the Road) for a refresher

ACTIVITY 1: CREATE A TOOLKIT

Be aware that transportation of props, backdrops, technical elements and other Presentation materials can often cause problems. Your team should work on preparing for any potential difficulties before you travel to your tournament. For example, your team could practice disassembling and reassembling props for transport. Additionally, your team should discuss any complex elements that may cause difficulties.

What are the potential elements of your Team Challenge solution that may fail? What tools would be required to fix those elements? What tools do they need for general upkeep and maintenance?

Many teams create travel toolkits for tournaments to help them solve problems on the road. The team can pack replacement parts, needed tools and anything else the team may need just in case they encounter any trouble.



Take time to create a list of items to include in your toolkit on a sheet of paper.

ACTIVITY: 2: PLAN A DRESS REHEARSAL

Dress rehearsals help teams polish any rough patches in their solutions. Your team can learn how audiences respond to particular sections of the Presentation, and it can also learn where team members seem to have trouble. It is important for your team to become comfortable with the performance time, setup, audiences and live performance. You can invite parents, friends or other family members to see the show. You can even make it an event!

TM Tip: A dress rehearsal can be a great chance for the Team Manager to share information with parents or people interested in going to the tournament. If you can, provide tournament information, Presentation times, travel information and any other information parents may need.

TM Tip: When presenting your dress rehearsal, make sure to remember the rules of Interference. Inform, or remind, audience members about the rules, and make sure they don't provide input regarding the team's solution. The audience can cheer or celebrate along with the team, but the team's solution is the team's alone. Afterward, the team should discuss its Presentation on its own.

TM Tip: It is also helpful for the team to create a list of things that could go wrong with the Presentation. This can help the team prepare for potential mishaps. Additionally, it can be helpful to have the team present while the Team Manager "sabotages" the Presentation. The Team Manager calls, "Time Out!" and then can remove an element of the Presentation by pulling an extension cord from the wall, physically removing an item or doing something similar.

ACTIVITY: 3: WATER TOWER

CHALLENGE

Your TASK is to build a tower as tall as possible that can withstand the pouring of 16 ounces of water over the top.

TIME

Your team will have up to 6 minutes to design and build your Water Tower. Your team will then have 1 minute to pour a full 16 ounces of water over the topmost part of your Water Tower.

PROCEDURE

Part One (6 Minutes): In Part One, your team must design and build your Water Tower. The Tower should be as tall as possible and it should also be capable of remaining after water has been poured on over it. At the end of Part One, your team's Water Tower will be measured for height.

Part Two (1 minute): The Water Tower will be subjected to a full 16 ounces of water being poured, by a team member, over the top of the Water Tower. The water must make contact with the top of the Water Tower. At the end of Part Two, the Water Tower will again be measured for height.

MATERIALS

- | | |
|---|---|
| <input type="checkbox"/> 1 sheet of newspaper | <input type="checkbox"/> 6 paper clips |
| <input type="checkbox"/> 1 plastic cup (16oz) | <input type="checkbox"/> 4 mailing labels |
| <input type="checkbox"/> 6 straws | <input type="checkbox"/> 3 rubber bands |
| <input type="checkbox"/> 4 pipe cleaners | <input type="checkbox"/> 2 pencils |
| <input type="checkbox"/> 4 craft sticks | |

Scissors may be used to develop your tower, but they may not be used in your solution.

SCORING

- A. 1 point (25 maximum) per 2 inches (5 cm) of your Water Tower's height at the end of Part One.
- B. 1 point (25 maximum) per 2 inches (5 cm) of your Water Tower's height at the end of Part Two.
- C. Up to 30 points for the creativity of your Water Tower.
- D. Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- Why do you think your team's tower succeeded or failed? What are 3 elements of the design that stand out most as effective or flawed?
- How well did your team work together? Did everyone contribute evenly? How have your teamwork skills matured from Stage 1 to now?

SESSION 16: THINGS TO DO BEFORE THE SESSION

GATHER MATERIALS

- 1 Styrofoam cup
- 1 paper bowl
- 1 piece of paper
- 4 mailing labels
- 1 paper bag
- 1 paper plate
- 1 piece of fabric
- 1 paper napkin
- markers
- pencils and pens
- stack of plain white paper (about 10 sheets)
- stopwatch/timer
- blackboard, whiteboard or flip chart (and something to write with)

PRINT COPIES

- print a copy of "Time Travel - Global Competency Mini-Challenge"

ACTIVITY: 1: TIME TRAVEL - GLOBAL COMPETENCY MINI-CHALLENGE

CHALLENGE

For this Mini-Challenge, your team will create a presentation about a trip back in time to a nation other than your own.

TIME

You will have up to 60 minutes research a nation other than your own and to create and practice your presentation. You will have up to 4 minutes to perform your presentation for points.

THE SCENE

Old places, people of the past and historical experiences are just some of the reasons why people would enjoy traveling back in time. In this Challenge, your team will create and present an original presentation about a group of travelers and their historical adventures in a nation other than their own. The team must include:

- The portrayal of one of the following: a landmark, event, custom, holiday, plant, animal, food, costume, language, or geographic feature that the travelers would only encounter on their visit back in time to their chosen nation.
- The dramatic portrayal of at least two different interpretations of the chosen national or cultural landmark, event, custom, holiday, plant, animal, food, costume, language, or geographic feature. For this Challenge, “interpretations” is defined as differing explanations or understandings of the same facts. For example, two people could witness a type of plant they have never seen before and have very different interpretations of what it is.

MATERIALS

- | | |
|---|--|
| <input type="checkbox"/> 1 Styrofoam cup | <input type="checkbox"/> 1 paper bag |
| <input type="checkbox"/> 1 paper bowl | <input type="checkbox"/> 1 paper plate |
| <input type="checkbox"/> 1 piece of paper | <input type="checkbox"/> 1 piece of fabric |
| <input type="checkbox"/> 4 mailing labels | <input type="checkbox"/> 1 paper napkin |

SCORING

- Up to 20 points for the physical or dramatic representation of the national or cultural landmark, event, custom, holiday, plant, animal, food, costume, language, or geographic feature.
- Up to 20 points for the integration of facts and data from research into presentation.
- Up to 20 points for the clear and thorough portrayal of the different interpretations.
- Up to 20 points for the creative use of materials.
- Up to 20 points for how well your team works together.



PROCESSING QUESTIONS

- What nation did your team choose to research? How did you choose that nation?
- What kind of materials did you use and how did you use them creatively?
- What do you now understand about the nation’s history you researched that you didn’t know before?

ACTIVITY 2: TEAM CHALLENGE PROJECT PLAN

REVIEWING

The final step of project management is the opportunity to complete all work, review and assess the end product, and take your final Presentation to a tournament to be appraised.

Below are some useful activities that were developed by the Project Management Institute Educational Foundation. They have been reproduced here for your team to use when reflecting and reviewing your time in Destination Imagination.

If you would like to download and use more PMIEF tools, visit the website below and click on "Toolkit Materials."
<http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers>

GROUP REFLECTION ACTIVITIES: LINE UP!

MATERIALS

A rope or item to make a "line" on the ground.

DIRECTIONS

1. Explain that the line represents how strongly students feel about the statements you are going to make. One end (decide which one) is the "strongly disagree" end of the line and the other end is the "strongly agree" end of the line. The middle is "neutral."
2. Read a statement and tell students to place themselves on the line depending on how much they agree or disagree with the statement.
3. Give students a practice statement such as, "I like chocolate ice cream." Ask them to place themselves on the line depending on how much they agree or disagree with the statement.
4. Do this activity with the suggested statements. After each statement, you can ask individuals to explain why they chose to stand where they did on the line. Or, have students turn to someone and explain their choice.
5. Remind students that there are no "right" or "wrong" places to stand on the line.

STATEMENTS

- I enjoyed participating in Destination Imagination this year.
- I gained new skills and knowledge by solving our chosen Team Challenge.
- I liked practicing Instant Challenges with my team.
- I feel more confident now that I have participated in DI.
- We did a great job on _____. (Team Manager fills in the blank)

PASS THE BALL

MATERIALS

Beach ball with questions written on each colored area

DIRECTIONS

1. Arrange the team in a circle.
2. Toss the beach ball. After three bumps/hits of the ball, the student who has the ball reads the question that their right thumb is on and answers the question, or they can "phone a friend" and ask someone else to answer it.
3. The game continues until everyone has had a chance to answer a question.



QUESTIONS

- How did your group work together?
- What did you contribute to the solution?
- What were the most important lessons learned?
- What would you do differently next time?
- What is something your team learned about the Challenge subject?
- What is one thing you learned about each of your team members?
- What is something the team learned thanks in part to someone they didn't know beforehand?

ACTIVITY 3: LAST LIST

Devote the rest of the time for your team to catch up before you travel to a tournament. Here are some things to do if you haven't already done them:

- Make sure your paperwork is complete and you have the correct number of copies of each form.
- Check Published Clarifications to make sure the team's solution is within guidelines.
- Reread Rules of the Road and the Team Challenge. Is the team ready to go? Does the team have everything required?
- Inform parents and supporters about the location and time of the team's Presentation. Organize travel as necessary.
- Have the team practice breaking down, packing and rebuilding their Team Challenge Presentation materials.
- Review creativity and critical thinking tools.
- Compile the toolkit. (Don't forget the duct tape!)
- Review the budget against Challenge budget amount.
- Smile and have fun!

STAGE 16: GOALS

- Enforce the process
- Celebrate what the team has accomplished
- Thank your supporters

Congratulations on completing the Destination Imagination season. We hope the experience was worth your effort, and we cannot thank you enough for supporting our program!

GOAL: 1

IMPLEMENT THE PROCESS

Make sure your team takes time to discuss the process and project planning it went through this season. Team members can learn a lot from sitting down to talk.

TM Tip: As the Team Manager, put effort toward promoting discussion and open conversation after the tournament. Your team should be encouraged to talk about any rough patches, successes and stressful moments. Have a team member take notes for next season.

GOAL: 2

CELEBRATE WHAT THE TEAM HAS ACCOMPLISHED

Regardless of your team's placement in the tournament, you should emphasize all the team has accomplished over the course of the season. Your team has learned a tremendous amount over the last few weeks, and team members have undoubtedly grown personally. Have a party to celebrate everything the team has accomplished! You can even include a funny awards ceremony!

GOAL: 3

THANK YOUR SUPPORTERS

Make sure your team takes the time to acknowledge your supporters. Destination Imagination is a community-based program, and teams couldn't succeed without support from family, friends and community members. Consider doing what many teams do: write thank-you notes or send cards to offer your gratitude.

CONGRATULATIONS! YOU HAVE LEARNED AND EXPERIENCED THE CREATIVE PROCESS FROM IMAGINATION TO INNOVATION.

APPENDIX

REFERENCES

1. Cone, J.G. (2005). "Real teams." Glassboro, NJ: Destination Imagination, Inc.; Tuckman, B. W., and M. A. C. Jensen. Stages of small-group development revisited. *Group & Organization Management* 2.4 (1977): 419-27. Print.
2. "ABC Brainstorming Strategy." Messmer, Anne M. ABC brainstorming strategy. Purdue University Calumet, 2009. Web. July 2012, <http://literacy.purduecal.edu/STUDENT/amessme/ABCBrain.html>
3. "Essential Project Design Checklist." Buck Institute for Education. Web. July 2016, http://www.bie.org/object/document/pbl_essential_elements_checklist
4. "Morphological Analysis." Generating innovative solutions: Tools and techniques. Global Creativity Corporation, 2007. Web. July 2012, <http://innovationstyles.com/isinc/content/toolstechniques0.aspx>
5. "TEACHERS." KWL Chart. Scholastic Inc., n.d. Web. 17 July 2012, <http://www.scholastic.com/teachers/lesson-plan/kwl-chart>
6. "Paired Comparison Analysis." - Decision-making skills training from Mindtools.com. Mind Tools Ltd., 1996. Web. July 2012, http://www.mindtools.com/pages/article/newTED_02.htm
7. Trilling, Bernie, and Charles Fadel. "21st Century Skills: Learning for Life in Our Times." San Francisco: Jossey-Bass, 2009. Print.
8. Bognar-Pinney, Rosemary. Instant Challenge information about working with materials.
9. Project Management Institute Educational Foundation. "Project Management Toolkit for Teachers." PMIEF.org. July 2015. <http://pmief.org/learning-resources/learning-resources-library/project-management-toolkit-for-teachers>

ADDITIONAL RESOURCES

The DI program is an "inquiry-guided learning" program that uses learning theory as its foundation. Below are some readings that support Inquiry-Guided Learning, Imagination, and Social Cognitive Theory:

1. Bandura, A. (1991). "Social cognitive theory of self-regulation." *Organizational Behavior and Human Decision Processes*, Vol. 50(2), 248-287.
2. Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). "How People Learn: Brain, Mind, Experience, and School." Washington, DC: National Academies Press.
3. Caine, R. N., & Caine, G. (1991). "Making Connections: Teaching and the Human Brain." Alexandria, VA: Association for Supervision and Curriculum Development.

4. Nilson, L. B. (2010). "Teaching at Its Best: A Research-Based Resource for College Instructors "(3rd ed.). San Francisco, CA: Jossey-Bass.
5. Prince, M., & Felder, R. M. (2006). "Inductive teaching and learning methods: Definitions, comparisons, and research bases." *Journal of College Science Teaching*, 36(5), 14-20.
6. Vygotsky, L. S. (2004). Imagination and creativity in childhood. *Journal of Russian and east European psychology*, 42(1), 7 – 97.
7. Creative Problem Solving - See Center for Creative Learning in Sarasota, Florida, <http://www.creativelearning.com/creative-problem-solving/about-cps.html>
8. Inquiry-guided learning – See MERLOT, <http://pedagogy.merlot.org/Inquiry-GuidedLearning.html>

ROADMAP

a guide for
informal learning



CHALLENGE PROGRAM MATERIALS 2016-17 BOOK SET

Roadmap

This guidebook provides a season timeline to help teams arrive at their Challenge solutions. Teams are introduced to the creative process and project management tools. Roadmap also integrates a variety of Instant Challenges for teams to practice.

Team Challenges

Teams choose from one of seven Challenges below.



Show & Tech
TECHNICAL



Top Secret
SCIENTIFIC



In It Together
ENGINEERING



Vanished!
FINE ARTS



3-Peat
IMPROV



**Ready, Willing &
Fable**
SERVICE LEARNING



Save the Day
EARLY LEARNING

Rules of the Road

This resource contains all of the rules, procedures and some of the forms that are required to participate in the Challenge Program at the tournament.



The PDF files for all the books in this set are available for download at Resources.DestinationImagination.org