



MARBLE RUN STEAM CHALLENGE

Challenge: Using the materials below, create a marble run that can successfully transport a marble from the beginning to the end of the track without falling.

Materials: Playdough, paper cups, tape, scissors, marble

Time: 15 minutes

Scoring (Optional):

- A. 2 points for each inch of height of your marble run (30 points max)
- B. 10 points if your marble travels from the beginning to the end of the track without falling
- C. Up to 20 points for the creativity of your marble run
- D. Up to 20 points for how well your group worked together



Teams learn technical concepts by practicing task-based challenges.

Doing performance challenges will help students gain confidence and expand their story creation skills.

Learning while having fun is joyful. Encourage students to unleash their wild and crazy side when creating solutions.



WANT MORE INFO?

Contact
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SPOON TOWER STEAM CHALLENGE



Challenge: Create a freestanding structure as tall as possible that can hold 2 metal spoons as far apart as possible.

Materials: 10 straws, 1 cardboard tube, 1 sheet of paper, 6 inches of tape, 1 8inx8in piece of aluminum foil, 2 metal spoons

Time: 8 minutes

Scoring:

- A. 5 points if your structure is successfully holding 2 metal spoons
- B. 2 points for each inch of height from the floor to each spoon
- C. 3 points for each inch of length between the two spoons
- D. Up to 20 points for the creativity of your structure



Introduction to Instant Challenge



New to DI? Here are some simplified Instant Challenges to do with your students.

What is Instant Challenge (IC)? IC is one-third of the Challenge Experience Team competition and the **backbone** of the learning process. Teams are given a challenge and a few minutes to create and execute a solution. Instant Challenges may be performance-based, task-based or a combination of both.

IC is where Destination Imagination teams learn 1) idea generation, 2) decision-making, 3) TEAMWORK, 4) creative use of materials and creative story-telling, 5) time management, 6) working through limitations, and so much more.

When solutions don't work, teams also learn from **failure**—a critical life skill!

In all cases, ICs are written to be **FUN!**





Candy Corn Cauldron STEAM Challenge

CHALLENGE: Using the materials below, design and build a structure from which you can hang a cauldron. Your cauldron must hang from the structure and must not be supported in any other way. Test your cauldron to see how much candy corn it can hold.

MATERIALS: 10 straws (preferably paper), 2 chenille sticks (pipe cleaners), 4 craft sticks, 2 pieces of paper, 4 mailing labels (or 6 inches of tape), 6 inches of string, 1 small paper or plastic cup, 1 bag of candy corn

TIME: 8 minutes

SCORING:

- A. 5 points if your cauldron is successfully hanging from your structure and is not supported in any other way
- B. 5 points if your cauldron is at least 2 inches from the surface (measuring from the bottom of the cauldron to the surface on which you built your structure)
- C. 5 points if you did not use the cup
- D. 3 points for every 5 pieces of candy corn your structure holds
- E. Up to 20 points for the creativity of your solution
- F. Up to 20 points for how well your group works together

A set of Practice Instant Challenges are provided to every DI Team and Oregon DI has hundreds more we happily share with Teams.

IC supplies include common items like paperclips, rubber bands, mailing labels, plain paper, etc. (clean out that junk drawer!)

SPAGHETTI TOWER STEAM CHALLENGE

Challenge: Using only spaghetti and mailing labels, build a structure as tall as possible that can balance a marshmallow on top.

Materials: 30 pieces of spaghetti, 20 mailing labels (or 30 inches of masking tape), 1 marshmallow

Time: 10 minutes



MINI INSTANT CHALLENGE: MUSIC MAYHEM

Challenge: Your **task** is to create a musical instrument that makes at least 5 distinct sounds. Give a comedic **performance** using your instrument.

Time: You will have 3 minutes to gather the materials. You will have 10 minutes to build and test your instrument and its sounds.

Materials: Any 3 materials found around your location



Teams practice 2-3 Instant Challenges at each meeting. The Team or others then evaluate **the solution:** what worked? what did not? What would the Team do next time?

At a future meeting the Team solves the challenge again. How did they apply their learning from the first time?



Water Works STEAM Challenge



Challenge: Build a structure as tall as possible that will support a cup of water.

Materials: 10 paper straws, 8 toothpicks, 3 index cards, 1 sheet of paper, 8 inches of tape, 1 paper cup

Time: 5 minutes

Scoring:

- A. 3 points for each inch of height of your structure
- B. 10 points if your structure successfully supports the cup of water
- C. Up to 20 points for the creativity of your structure
- D. Up to 20 points for how well your group works together

We suggest you try this one OUTSIDE!



Egg Tower STEAM Challenge



Challenge: Using only straws and masking tape, build a freestanding structure as tall as possible that can hold an egg.

Materials: 15 straws, 8 inches of masking tape, 1 egg
*You can use a weighted (e.g., pennies) plastic egg instead of a real egg.

Time: 7 minutes

Scoring:

- A. 10 points if your structure successfully holds the egg 1-3 inches from the ground
- B. 15 points if your structure holds the egg 4 or more inches from the ground
- C. 15 points if your structure is at least 12 inches high
- D. Up to 20 points for the creativity of your structure
- E. Up to 20 points for how well your group works together

