

Marble Run Experiment



Intro to Trial and Error

Grade: PreK-3 Prep Time: 10 minutes Lesson Time: Flexible

Students will be able to use their imagination to build marble runs and test how the marble rolls through it.

OBJECTIVES:

- Foster curiosity
- Introduce students to trial and error
- Logical problem solving skills
- Practice fine motor skills
- Introduce students to gravity and physics
- Encourage creative play and problem solving

1.0 Materials

Required Materials

Please Supply:

For marble run building (per group of 5-6 students)

- Marble Genius Starter Set, Super Set or Extreme Set Pieces:
 - 20 tubes (minimum)
 - 3 bases (minimum)
 - 5 different action pieces (wheel, ladder, squiggly, etc.)
 - 1 top entry piece

Setting the Stage

Show students how the pieces fit together and set up a quick run to demonstrate how the marble can move through all the pieces.

Depending on your students' skill set, you may want to demonstrate how to build a base for a sturdier marble run.

Setting the Stage

Give students marble run sets and let them use their imagination to build marble runs and test how the marble rolls through their model.

You can guide the students to try to challenge themselves.

- Build the highest run they can.
- Build a run that the marble stays in longer than their current run.
- Include the Alternating Y piece in the marble run, and record how many times it goes down each path.

FOLLOW UP

Interact with students as they are building. Help them through places they are stuck. Encourage them to try new things and see what happens.

Have the students draw a picture of their favorite marble run. Encourage lots of colors and even try water paints!