## **Objective**

By the end of this lesson, the Grade 2 homeschool student will be able to design and construct a marble run using only the materials provided.

## **Materials and Prep**

- Cardboard tubes (toilet paper rolls, paper towel rolls, etc.)
- Scissors
- Tape
- Marbles
- Flat surface to work on
- Clear workspace

## **Activities**

- 1. Introduce the concept of a marble run to the student. Explain that a marble run is a structure made of tubes and tracks where marbles can roll down.
- 2. Show the student the materials needed for the marble run. Discuss the different types of tubes and how they can be connected to create a track for the marbles.
- 3. Guide the student in designing their marble run. Encourage them to think about the path the marble will take, the height of the structure, and any obstacles or features they want to include.
- 4. Assist the student in cutting and connecting the tubes using tape to create their marble run. Encourage them to experiment with different configurations and test their design as they go.
- 5. Once the marble run is complete, have the student test it by rolling marbles through it. Discuss any adjustments or improvements that can be made based on their observations.

## **United States of America: Grade 2 Talking Points**

- "The United States of America is a country located in North America."
- "The United States is made up of 50 states and the District of Columbia."
- "Each state has its own capital city, and the capital of the United States is Washington, D.C."
- "The United States has a democratic government, which means the people have a say in how the country is run."
- "The United States is known for its diverse culture, with people from many different backgrounds and ethnicities."
- "Some famous landmarks in the United States include the Statue of Liberty, Mount Rushmore, and the Grand Canyon."