In this STEM challenge for kids, children will create a paper plate marble maze game inspired by pinball machines using a paper plate and a marble. This engineering activity is great for kids from kindergarten age up through 4th, 5th and 6th grades!



In our most recent science club, I challenged my students to create a pinball-like marble maze game using a paper plate, some basic craft supplies, and marbles. Kids created all kinds of cool structures on their paper plates for their marbles to go through as they tilted the plate in different directions using their hands.

Materials for Paper Plate Pinball Challenge

- Paper plates (The ones with high edges work best. I'd also love trying the project with these larger oval plates in the future!)
- Scissors
- Construction paper
- Tape
- Markers
- Marbles
- Optional: Wikki Stix, pipe cleaners, and/or straws

Directions for Paper Plate Marble Maze/Pinball Challenge

If your students are not familiar with pinball machines (yes, we're that old!), watch some pinball machine YouTube videos together. Notice the different ramps, bumpers, and other pinball machine parts.

- 1. Provide each child with one paper plate and access to various craft supplies. I demonstrated how to create some simple arches using strips of construction paper. I also provided each student with their own <u>individual pack of Wikki Stix</u>. (You can also buy them in <u>large quantities</u>.) You can do this activity with just construction paper and tape, or try other materials as well, like <u>pipe cleaners</u> or straws.
- 2. Let the kids get busy creating and testing out their pinball machines with marbles.