### Marble Maze

## What you'll need:

- 1 cereal box
- tape
- 4 or 5 plastic bottle caps in various colors
- 1 piece of construction paper 5"x 1" for arch
- Elmer's Glue
- Plastic dinosaur (or anything else for the -10 bumper)
- 1 marker to write numeric values on each bottle cap
- 1 marble
- Stickers (optional)

# What you'll do:

Tape the cereal box shut

Have an adult cut the front face of the cereal box off, but leave the sides intact (See photo)

Have an adult cut a circle in the side of the box. This is where the marble enters. Glue down plastic bottle caps with Elmer's Glue.

Glue down plastic dinosaur or other item used for the subtraction value (we used -10, see photo). Let dry. Put in hot car or dry with hair dryer to dry faster.

Tape down construction paper arch

Add stickers (optional)

Add numeric values to each bumper

# How to play:

Insert marble through hole. As child rotates box, write down the numeric value of each bumper the marble touches. If marble touches the dinosaur, write -10. After marble has touched each bumper, child tries to get the marble under the arch, which ends the game. Then, child adds (or subtracts) to get the final sum. You determine the numbers to adjust to the child's skill level with math. Repeat again with new set of numbers.

### Discuss:

*Gravity* - the force that attracts a body toward the center of the earth, or toward any other physical body having mass.

Kinetic energy - energy a body possesses by virtue of being in motion.

Velocity – the speed of something in a given direction.





