Name:

Spin-A-Ma-Jig

Precise Positions

Movement is simply the act of changing your position. Before we explore types of movement, let's practice some positioning skills!

Fill in the blank with appropriate words to describe the objects' positions!

The boat is going _____ the bridge.

The dog is in the _____ seat of the car.

The river is in _____ of the trees.

The sun is _____ the mountains.

The bird is on the _____ side of the nest.

The car is on the _____ side of the house.

The turtle is climbing _____ the log.

The city is _____ the plane.

Button Spinner

Materials:
- 1m piece of string
- Large button with two holes

Instructions:

1. Lace the string through both holes in the button by going in one hole and out the other.

2. Tie the ends of the string to make large loops, and move the button to the center of the string.

3. Hold one loop and twist the button until the string is twisted tight. Pull your hands apart and straighten the string.

4. Relax the string, and then continue to tighten and relax.

Talk About It!

1. Describe the motion of the button when you tighten the string.

2. Describe the motion of the button when you relax the string.
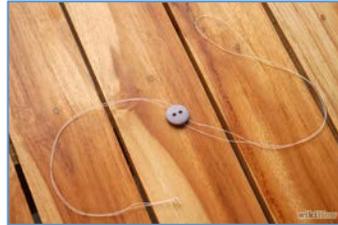
Energy!

In this widget, we see two types of energy: **Potential Energy** (when the string is twisted and ready to spin!) and **Kinetic Energy** (when the button is spinning around).

What types of energy do you think are shown above?

Many Movements!

Can you name the different types of movement being shown in these pictures?
Vibration, rotation, bouncing, levitating, sliding
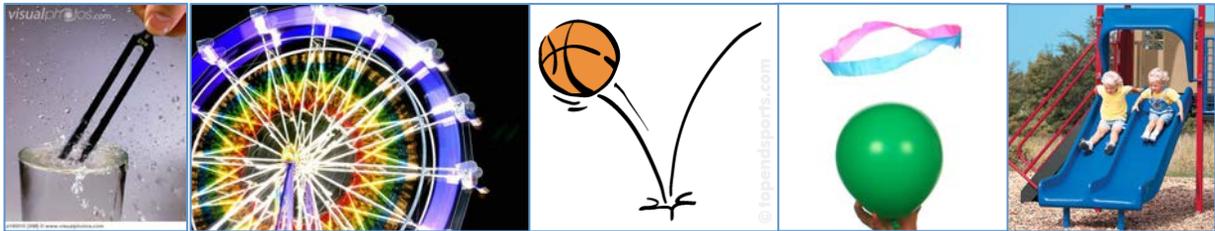
Can you match these movements up with the forces that caused them?

Gravity pulling downward along a curve.

Motor spinning to turn the wheel.

Static Electricity levitating a light object.

Gravity making an object bounce.

Striking an object so it vibrates.

Wind Up Clocks

Wind up clocks use kinetic and potential energy, very similar to our button! When you wind a clock, you store the energy. The clock then runs until all this energy is used up and has to be wound up again.