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: <b>Potential Energy</b> (when the string is twisted and ready to spin) and <b>Kinetic</b> <b>Energy</b> (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?

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,

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,

Can you match these movements up with the forces that caused them?

Gravity pulling downward along a curve.

Motor spinning to turn the wheel.

Name:

#### Image Sources:

#### **Precise Positions:**

1. Successful Workplace: <u>http://www.successfulworkplace.org/2014/01/05/big-data-</u> marketing-uplift-modeling/

# **Button Spinner**:

- 1. Second Law Media: <u>http://www.secondlawmedia.com/how-much-time-does-it-take-to-manage-a-ppc-campaign/</u>
- 2. M & J Trimming: http://www.mjtrim.com/pearlized-round-fashion-button-2-holes.html
- 3. Sleeping Forest Studios: <u>http://sleepingforeststudios.com/portfolio/old-fashioned-button-spinner/</u>

# Talk About It:

1. Wikihow: <u>http://www.wikihow.com/Make-a-Dancing-Button</u>

#### Energy!

- 1. Shutterstock: <u>http://www.shutterstock.com/s/playground/search.html</u>
- 2. Serif: http://www.serif.com/blog/3-things-to-do-before-printing-your-photos-at-home/

# Many Movements:

- 1. Visual Photos: <u>http://www.visualphotos.com/image/1x6037450/tuning\_fork\_vibrations\_displacing\_water</u>
- 2. Inhabitat: http://inhabitat.com/santa-monicas-ledsolar-powered-ferris-wheel/
- 3. Chaaad: http://chaaad.wordpress.com/2011/11/
- 4. Steve Spangler Science: <u>http://www.stevespanglerscience.com/lab/experiments/static-flyer-flying-bag</u>
- 5. Landscape Stuctures: <u>http://www.playlsi.com/Explore-Products/Product-Lines/Outdoor-Playsystems/PlayShaper/PS-Playground-Slides/PS-Double-Poly-Playground-Slide.aspx</u>

# Wind Up Clocks:

1. SideTrips: http://bonkersycarax.blogspot.ca/2010/12/grandfathers-clock.html