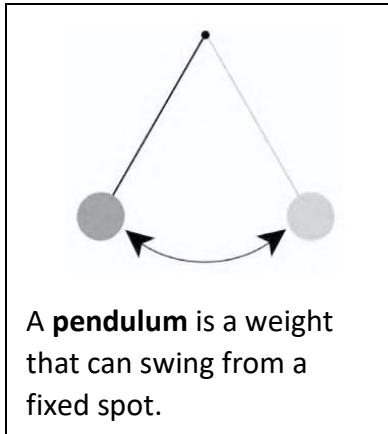
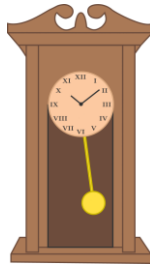


## SWINGING and PENDULUMS (K-2)

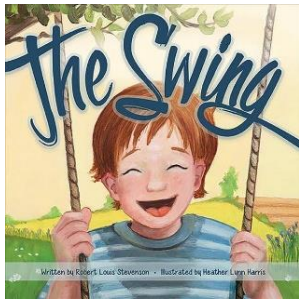
### The SCIENCE of SWINGING:



The weight on the end of a pendulum is called a **bob**.



The bob swings back and forth in a **pattern** called a **vibration**.



### READ:

[The Swing](#) is a poem by Robert Louis Stevenson. Click the poem title for a read aloud or visit the [Poetry Foundation](#) to read it for yourself!

### ACTIVITY: PENDULUM

Materials: 1 paperclip, watch or clock with a second hand, string, masking tape, pencil, ruler, scissors, a penny, paper

**PENDULUM INSTRUCTIONS:**

1. Use the ruler to measure 25 inches of string.
2. Tie the paperclip (tightly!) to one end of the string.
3. Loop the string around the pencil, and secure it with a piece of tape.
4. Clip a penny onto the paperclip and your pendulum is complete!

### TRACKING the VIBRATIONS:

1. Secure the pendulum over the edge of a table.  
**TIP:** Make sure it sticks out a little so the bob can swing freely.
2. Test it: Raise the bob (penny) to one side, and release. One vibration is one trip back *and* forth).
3. Using the second hand on the watch, count how many vibrations the pendulum swings in 15 seconds. Do this 3 times.
4. Record your findings. Do you see a pattern?

**EXPLORE:** Repeat the experiment, but shorten the string and/or add another penny. Is there a difference? What happens when you raise the penny even higher?

For step-by-step instructions, watch the video at: [Pendulum STEM Activity](#)

*This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.*

*Having fun? Send pictures or video links of you and your Stories & STEM projects to [csharkey@literacypbc.org](mailto:csharkey@literacypbc.org)*

