GCPS Science and Engineering Fair Activity

What is the science behind toys?

Have you ever stopped to think about the science and engineering behind toys?

While they may seem simple, many toys have a surprising amount of engineering that goes into them!

In this activity, you will learn about the physics of fidget spinners from GTRI research scientist Jack Wood. After watching a video, you can experiment with a simulation of another playground toy, the seesaw.

Georgia Tech Research Institute
STEM@GTRI

1. Click the button below to watch a video on the physics of fidget spinners.

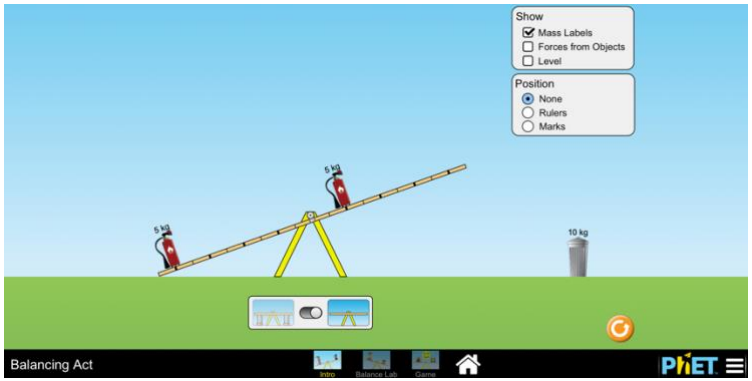
Watch Physics of Fidget Spinners – STEM@GTRI

2. After watching the video, click the button below to access a simulation from the University of Colorado. Click on "Intro" once the site loads.

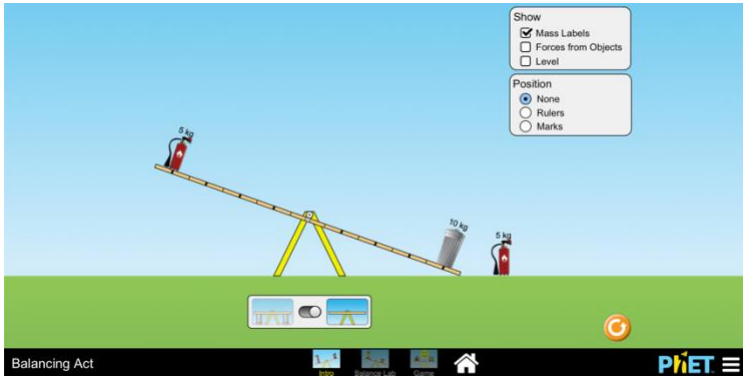
Visit Balancing Act Simulation

As you experiment with the simulation, see if you can answer the following questions:

1. Setup your seesaw as shown. Can you change the placement of the fire extinguishers so the seesaw is perfectly balanced?



2. Setup your seesaw as shown. Can you figure out how to balance the seesaw?



3. Once you've experiment and successfully completed the tasks below, see if you can play all four levels on the game tab!