



Speed and Motion: Teacher Tips & Helpful Hints

N.C.S.S: PS.3.2 Understand motion and factors that affect motion.

The Student Activity Pack is broken up into three different activities:

- **Forces, Motion, and Direction** (PS.3.2.1)
- **Races** (PS.3.2.2)
- **CIBL Flyer** (PS.3.2.3)

Activity 1: Forces, Motion, and Direction

- There is a *Forces, Motion, and Direction: Student Activity Sheet* available.
- There is a *Forces, Motion and Direction: Google Slides* in the 5E model that has literacy integration.
- The ping pong ball will bounce and stay in a close area.
- Extension: In part 3 students can exchange drawings and see if they can complete their partners path.

Activity 2: Races

- There is a *Races: Student Activity Sheet* available.
- There is a *Races: Google Slides* in the 5E model that has literacy integration.
- Student should make sure the labels are on the flat surface and not the tape measure.
- Students will need a timing device for Part 3.

Activity 3: CIBL Flyer

- There is a *CIBL Flyer: Student Activity Sheet* available.
- There is a *CIBL: Google Slides* in the 5E model that has literacy integration.
- Students will need to practice dropping their CIBL flyer multiple times. It should spin.

N.C.S.S Clarifying Objectives

- PS.3.2.1 Carry out investigations to infer changes in speed or direction resulting from forces acting on an object.
- PS.3.2.2 Carry out investigations to compare the relative speeds (faster or slower) of objects that travel the same distance in different amounts of time.
- PS.3.2.3 Use models to explain the effect of Earth's gravity on the motion of any object on or near the Earth.