



Invisible Forces: Teacher Tips & Helpful Hints

N.C.S.S: PS.4.1 Understand how various forces affect the motion of an object.

- The Student Activity Pack is broken up into three different activities:
 - **Magnets and Materials** (PS.4.1.1)
 - **Magnetic Force** (PS.4.1.1)
 - **Static Electricity** (PS.4.1.2)

Activity 1: Forces, Motion, and Direction

- There is a *Magnets and Materials: Student Activity Sheet* available.
- There is a *Magnets and Materials: Google Slides* in the 5E model that has literacy integration.
- Have students only take out the magnet and paperclip at the beginning.

Activity 2: Magnetic Force

- There is a *Magnetic Force: Student Activity Sheet* available.
- There is a *Magnetic Force: Google Slides* in the 5E model that has literacy integration.
- Students can use regular tape to tape down the string in Part 1.
- If the paperclip does not float check the string length. If it is too long place a piece of tape c

Activity 3: Static Electricity

- There is a *Static Electricity: Student Activity Sheet* available.
- There is a *Static Electricity: Google Slides* in the 5E model that has literacy integration.
- You may need to show students how to tie a balloon or blow up the balloons before the activity.
- There are multiple balloons for each student.

N.C.S.S Clarifying Objectives

- PS.4.1.1 Ask questions to summarize the relationship of magnetic interactions between two objects not in contact with each other.
- PS.4.1.2 Carry out investigations to explain how electrically charged objects push or pull on other objects to produce motion.