Invisible Forces: Teacher Tips & Helpful Hints

N.C.S.S: 4.P.1 Explain how various forces affect the motion of an object.

- The Student Activity Pack is broken up into three different activities:
    - **Magnets and Materials** (4.P.1.1)
    - **Magnetic Force** (4.P.1.1)
    - **Static Electricity** (4.P.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

- 4.P.1.1 Explain how magnets interact with all things made of iron and with other magnets to produce motion without touching them.
- 4.P.1.2 Explain how electrically charged objects push or pull on other electrically charged objects and produce motion.