

Science Emergency: Forces

We are going to get started talking about forces and need to help get our brains around some ideas about what forces are, what they do, and how they affect objects. It's...a SCIENCE EMERGENCY!

Part One

1. Make a paper ball.

2. Hold the paper ball and a tennis ball 1 meter off the ground, with the bottom of the ball at 1 m. If you were to drop both at the same time, without throwing them, which do you hypothesize would land first? Write your hypothesis in the correct "If..., then..." format.

If _____,

then _____.

3. Drop the two balls at the same time and record your observations.

4. Now, take the paper ball, tennis ball, and a river rock and hold them at 1 meter, with the bottom of the objects at 1 m.. Write your hypothesis in the correct "If..., then..." format.

If _____,

then _____.



Glue this side into your notebook



5. Drop the three objects at the same time and record your observations.

6. Did the objects have different masses? Did that affect how they fell to the ground?

7. Was your hypothesis supported by the observations/evidence? Explain.

8. Now take the paper ball and a flat piece of paper.

9. 2. Hold the paper ball and flat paper (parallel to the ground) 1 meter off the ground, with the bottom of the ball and flat paper at 1 m. If you were to drop both at the same time, without throwing them, which do you hypothesize would land first? Write your hypothesis in the correct "If..., then..." format.

If _____,

then _____.

10. Drop the two objects at the same time and record your observations.

11. Was your hypothesis supported by the observations/evidence? Explain.

12. Were the two objects the same or different masses? How do you know?

12. Did gravity act on them differently or was something else involved?

13. What else might have been playing a role in why the objects fell the way that they did?

14. Do you think forces are acting on us all the time? Give examples you think apply.