

Science To Go!

The Opposition of Mars

From the lab of: Talcott Mountain Science Center

Ingredients

Ask a few friends, or family members, to help you with this project! You'll need at least ONE other person for this demonstration.

You'll Need:

- 3 Pieces of Paper
- 1 Marker
- 3 Safety Pins or some Duct Tape

Substitutions

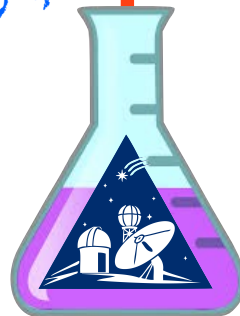
- ONE object that can remain stationary if set down on the ground or floor.

Questions to Consider

After completing the activity, see if you can answer these questions:

- Who got back to the starting line first?
- Keep going. Where is the "M" and where is the "E"? Did they end up next to each other or did one pass the other?

BONUS: If you can, have "E" and "M" walk forward at the same time!



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How to

- Each piece of paper needs to have a letter on it. Taking your marker, write the letter E on the 1st piece, the letter S on the 2nd piece, and the letter M on the 3rd piece.
- Take your stationary object and set it down. Place the paper with the letter "S" on the stationary object.
- If you were able to find more than one friend to help you, ask one of them to stand in one spot and FREEZE!
Secure the piece of paper with the "S" on your friend's shirt with the safety pin or a piece of duct tape instead.
- Choose one of the other letters and secure it to your shirt. Do the same for your friend who does not have a letter secured to them!
- The person wearing the letter "E" should stand a good distance away from your friend, or the stationary object, that is marked by the letter "S".
- The person wearing the letter "M" should stand at least 10 feet away from whomever is wearing the letter "E".

How to cont.

- Mark this starting point with a piece of duct tape.
 - Have the person wearing the "M" take ONE step forward, beginning to move around the "S". The person wearing the "E" will take TWO steps, moving in the same direction as the "M".
- (Think about the way the planets rotate around the Sun: this is the circular path you want to try to mimic!)
- Continue this pattern (ONE step forward for "M", TWO steps forward for "E") until one person makes it back to your starting point.

