

Interaction Station Directions

Station 1: Hands

1. Place the palms of your hands together.
 2. Rub them together briskly for 15-30 seconds.
 3. Repeat, pushing your hands together harder.
 4. Describe and map the energy interactions in your scientist's notebook.
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Station 2: Plastic Shopping Bag

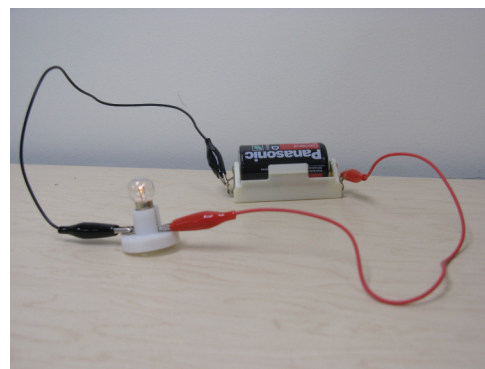
1. Crumple a plastic shopping bag into a ball.
 2. Vigorously rub the bag across a plastic desk top for 10-15 seconds.
 3. Hold the bag over the small bits of paper.
 4. Observe what happens.
 5. Describe and map the energy interactions in your scientist's notebook.
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Station 3: Paddle Ball

1. Stand a safe distance from others; try to hit the ball in succession with the paddle.
 2. Observe what happens.
 3. Describe and map the energy interactions in your scientist's notebook.
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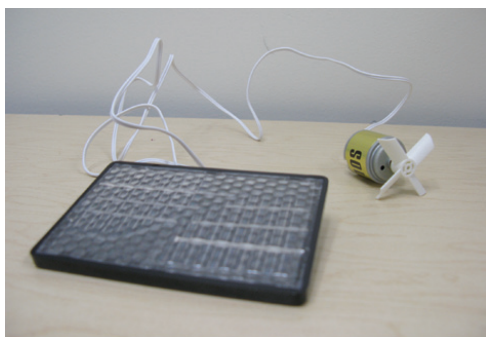
Station 4: Electric Circuit

1. Use the materials at this station to assemble an electric circuit as shown in picture.
2. Observe what happens.
3. Describe and map the energy interactions in your scientist's notebook.



Station 5: Solar Powered Propeller

1. Attach the propeller to the shaft projecting from the motor.
2. Connect the wires of the solar panel to the wires of the motor.
3. Hold the propeller and motor up off the table. Position the solar panel towards a source of light energy (a sunny window or lamp).
4. Observe what happens.
5. Describe and map the energy interactions in your scientist's notebook.



Station 6: Noise Maker

1. Blow gently into one of the paper noise makers.
2. Record what happens.
3. Describe and map the energy interactions in your scientist's notebook.

Station 7: In Hot Water

1. Place a cool metal spoon in the ceramic mug of hot water for 2 minutes.
2. Touch the handle of the spoon.
3. Describe and map the energy interactions in your scientist's notebook.

Station 8: Beads

1. Remove the towel covering the beads.
2. Immediately observe the beads.
3. Position the beads near bright sunlight or place under a lamp with a full spectrum light bulb. (Note: keep your hands a safe distance from the bulb to prevent burns.)
4. Observe the beads.
5. Describe and map the energy interactions in your scientist's notebook.
6. Place the beads back underneath the towel for the next group.

Station 9: Spinning Top

1. Click handle of top in place. Turn handle counterclockwise one full turn. (Do not force. Top will “click.”)
 2. Holding the top upright in the center of table or in the box lid. Push button to release top.
 3. Observe what happens.
 4. Describe and map the energy interactions in your scientist's notebook.
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Station 10: Yo-Yo

1. Wrap the string evenly and tightly around the center shaft of the yo-yo.
 2. Place your finger through the loop at the end of the yo-yo's string.
 3. Hold the yo-yo in the palm of your hand – palm facing up.
 4. Allow the yo-yo to roll off your hand towards the ground. (Note: You may want to stand up to do this part).
 5. As the yo-yo reaches the end of the string, quickly flip your hand around so that the yo-yo winds back up the string to your hand.
 6. Observe what happens.
 7. Describe and map the energy interactions in your scientist's notebook.
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Station 11: Pop Up Toy

1. On a smooth surface, press down gently on the top of the toy's head until the suction cup sticks.
 2. Observe what happens.
 3. Describe and map the energy interactions in your scientist's notebook.
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Station 12: Waves

1. Gently place the tub toy (rubber duck or small boat) at one end of the pan of water. Wait for the water to settle.
2. Quickly dip your finger into the water in the opposite end of the tub from the toy.
3. Observe what happens.
4. Describe and map the energy interactions in your scientist notebook.

Alternative/Substitute Interaction Station Directions

Station 2: Springy Salt

1. Sprinkle some salt on the table.
 2. In a clean spot, stick a piece of plastic wrap to the top of the table.
 3. Vigorously rub the wrap with a paper towel for 10-15 seconds.
 4. Carefully lift the plastic wrap by its edges and lower it over the salt.
 5. Observe what happens.
 6. Describe and map the energy interactions in your scientist's notebook.
 7. Remove all the salt from the table for the next group.
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Station 3: Paddle Ball

1. View the Discovery Channel's Time Warp Paddle Ball Champ clip.
<http://dsc.discovery.com/videos/time-warp-paddle-ball-champ.html>. (You may need to watch it twice.)
 2. Observe what happens.
 3. Describe and map the energy interactions in your scientist's notebook.
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Station 4: Electric Circuit (using an Energy Ball or other toy that completes a circuit when held in a person's hand)

1. Place the Energy Ball in your hand.
 2. Observe what happens.
 3. Describe and map the energy interactions in your scientist's notebook.
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Station 6: Noise Maker (using a sound tube)

1. Firmly grasp the sound tube on one end.
2. Position yourself a safe distance away from others. Swing the tube in a circular motion at various speeds.
3. Record what happens.
4. Describe and map the energy interactions in your scientist's notebook.

Station 10: Marble and Ramp

1. Make a simple ramp using a ruler (one that has a center groove) and three books.
2. Position the marble at the top of the ruler. Release the marble.
3. Observe what happens.
4. Describe and map the energy interactions in your scientist's notebook.