

Grade 7 Science
Week of February 22 – February 25

Unit 3 Inquiry Project



Intro to Inquiry Projects: <https://youtu.be/NtE0es3r7CY>

Instructions:

- Select a project for this unit from the list below. Detailed directions are in the various PDFs.
- If you are working on a computer, each project should be in **ONE** file (often a WORD document) where all data, pictures, scans, etc.....are inserted into this document. It should be clearly named and completed.

	<p>Can you build a basic speaker using only magnets and a bit of wire? Can you modify it and "tweak" it to make it sound better? What are the principles involved?</p> <p>Topics: circuits, magnets, speaker</p>
	<p>Did you know that your ear buds likely contain tiny electromagnets? What is an electromagnet? Why are some stronger than others? Can you build one?</p> <p>Topics: circuits, magnets, electromagnet</p>
	<p>How did Thomas Edison build his first light bulb? How did it create light? Can you make a better version?</p> <p>Topics: circuits, physics, light bulb</p>



What are conductors? Insulators? Can you build a tester capable of determining a "good" versus a "bad" conductor?

Topics: conductor, resistance, circuits



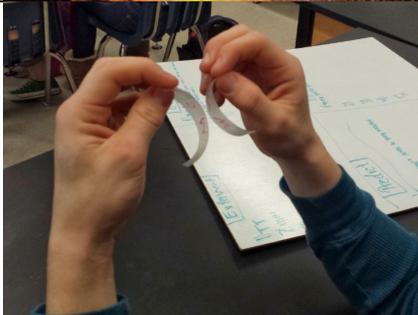
How does a photocopier create an image? How does it transfer this image to a new sheet of paper to make a "copy"? What does this have to do with static electricity?

Topics: charges, physics, static electricity



How much energy does the average student consume on a given day? In what forms? Where do we get our energy from? How can we reduce our energy needs?

Topics: conservation, efficiency, energy



Why do socks stick to towels when you take them out of the dryer? What is static electricity? How can you create a static charge?

Topics: charges, physics, static electricity



Can you cook a pizza using just the sun as a source of energy? Can you design and improve a solar oven?

Topics: heat, solar, energy