
Cycle 1 STEAM

Energy and Magnetism

3-PS2 Motion and Stability: Forces and Interactions: PS2-3- Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.

Week 1, Day 1: Phenomenon & What do you Wonder?

3rd Grade Standard:

3-PS2 Motion and Stability: Forces and Interactions: PS2-3- Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.

Phenomenon: [How to make magnetic slime](#)

- [Recipe and Instructions](#)



Wonder Board:



Week 1, Day 2: What do you know about the **Phenomenon** (write/draw)

Question Types: Let's put our questions into categories

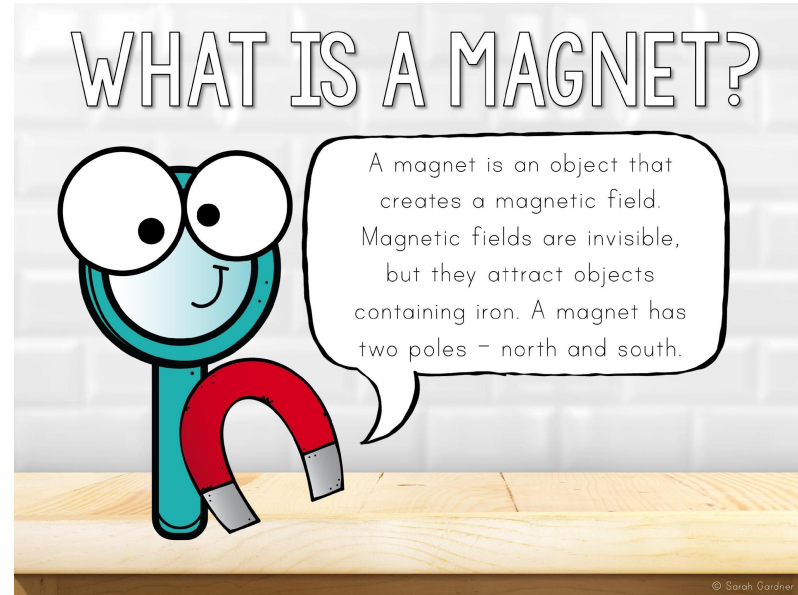
Patterns	Cause and Effect	Systems	Structure and Function	Energy and Matter	Stability Change	Scale and proportion Quantity

Can I test that question?

Week 2: What do you think? Creating Scientific Explanations

- Scientific Causes:
- Components of the system:
- How do those connections explain, describe, and predict

What do you think you could do with magnets that would be interesting? Trains, medicine, phones (?),



Week 3: How can you test it?

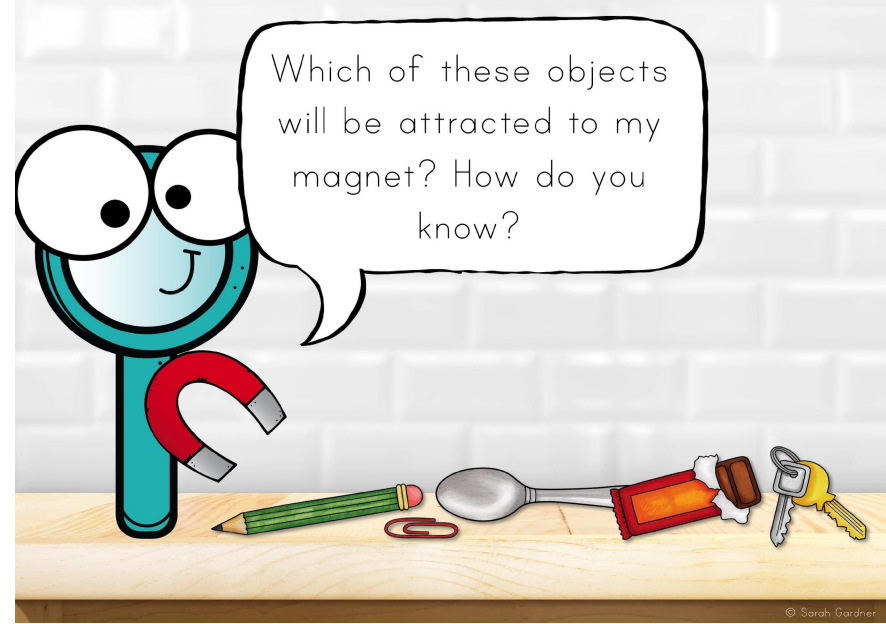
Investigate the phenomenon

Identify the evidence to be collected

Have a plan

Collect evidence

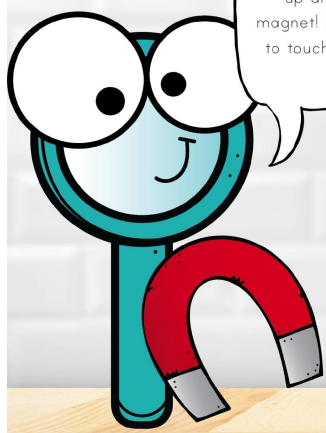
Improve design



Week 3, Day 2: How can you test it?



Week 3, Day 2: Write -How do you know?

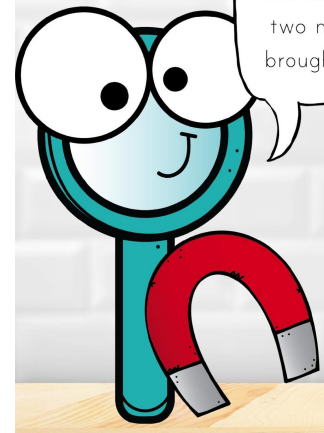


I held my magnet over a small screw, and it flew up and stuck to my magnet! I didn't even have to touch it! Why did this happen?

___/___/___

This happened because _____

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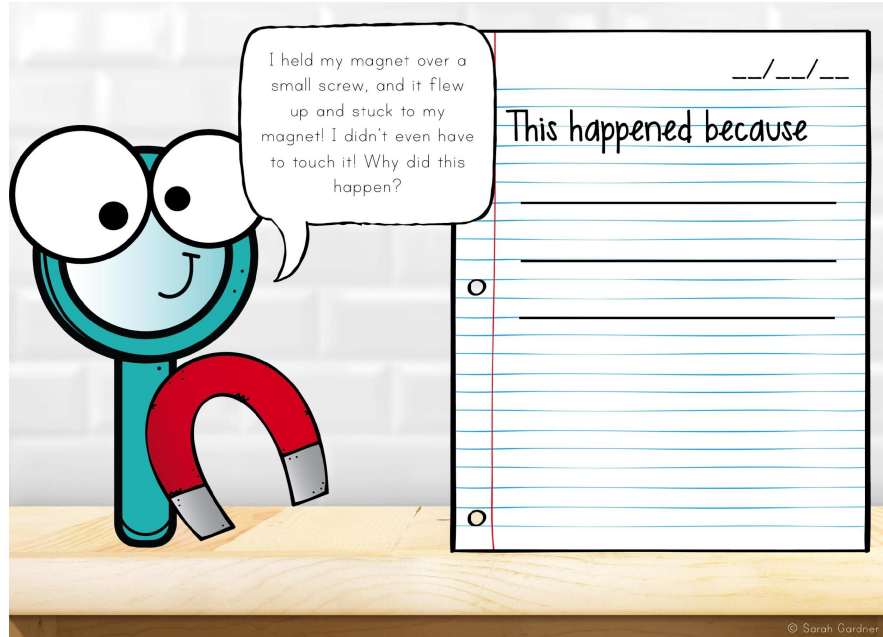
What happens with the north poles of two magnets are brought together?

___/___/___

The magnets will _____

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Week 4 Day 1- Students Present Writing-

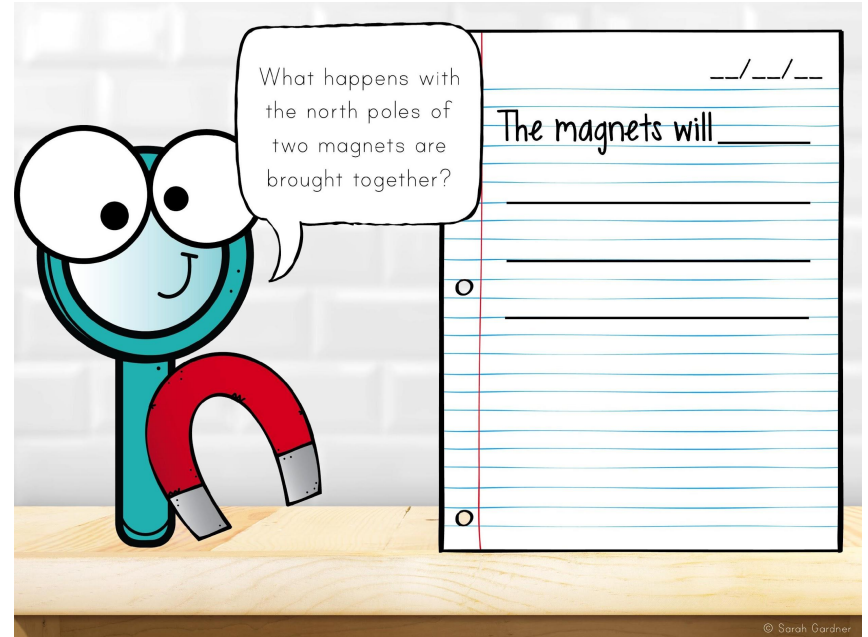


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© Sarah Gardner



What happens with the north poles of two magnets are brought together?

___/___/___

The magnets will _____

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Week 4, Day 2 STEAM Challenge Project Planning

How would you like to work on this STEAM Challenge?

Individual Project- Break out Room 1

Partner Project (everyone must have a job/voice in the challenge): Break out Room 2

Team/Group Challenge (everyone must have a job/voice in the challenge): Break out Room 3

Create a system similar to our magnetic lock, present the system, and how it works using only supplies found in your home! (do not purchase anything extra).

Be prepared to talk about what went wrong, how you fixed or modified it, explain the system using our STEAM vocabulary. Repel, attract, magnet, magnetize, North/South pole.

Ideas- <https://www.steampoweredfamily.com/magnet-experiments-for-kids/>

<https://frugalfun4boys.com/spinning-pen-magnet-science-experiment/>

<https://www.thebestideasforkids.com/magnet-experiment/>

Week 5- Projects. In class work time.

