

Name (First and Last)

# Physical Science- Electricity and Magnetism



April 6th- 13th

This has been created to allow you flexibility in completion and hopefully enough choices for you to accomplish tasks that work for you.

## **THE ASSIGNMENT:**

- Put in Your name (first and last).
- **Your goal is to reach 100 points. You can earn a maximum of 110 points, which would give you 10 points of extra credit.**
- **THERE IS A POSSIBILITY OF 195 POINTS**
  - Each assignment has its own point values. **You can only do each task once, UNLESS IT SAYS OTHERWISE** - EX: OFFICE HOURS CAN BE DONE TWICE
  - The assignment types are split up on different pages. You have the choice to **Watch, Read, Research, Explore, or Collaborate.**
  - If you have questions, email me at [adriver@portervilleschools.org](mailto:adriver@portervilleschools.org) or join my Zoom office hours (information has been sent out via Google Classroom).
  - **Type your answers directly into the box underneath each question. When you are done turn in this entire document in Google Classroom. You MUST hit "SUBMIT" in order for me to grade it.**
  - **If you don't have the internet at home**, you can go to Monache and download all of the articles and videos from [this folder](#). There is now WiFi routers mounted outside of the gym. You can drive up, open your Chromebook, **download everything to a flash drive** (it will NOT stay on the hard drive of the Chromebook), including this Google Doc, and work on this at home. Please **stay in your car!**



# Watch

★ **EdPuzzle:** *Magnetic Mania: Magnets on the Earth and Beyond* - located in Google Classroom = **10 Points**

- EdPuzzle: Magnetic Mania: Magnets on Earth and Beyond
- Watch the video and answer the questions as you go.
- Write a Paragraph (3-5 sentences) describing how magnets play an important role in how electricity is generated for everyday use.

★ **EdPuzzle:** *Crash Course - Solutions* - located in Google Classroom = **10 Points**

- EdPuzzle: Crash Course - Magnetism
- Watch the video and answer the questions as you go.
- Write a Paragraph (3-5 sentences) describing the relationship between electricity and magnetism.

★ **EdPuzzle:** *How Electrical Generators Work* = **10 Points**

- EdPuzzle: How Electrical Generators Work
- Watch the video and answer the questions as you go.
- Write a Paragraph (3-5 sentences) describing how electricity is generated using magnets and wire.



# Read/Write

★ **NewsELA:** Magnets and magnetism - Reading -located in Google Classroom/NewsELA = **20 Points**

- Read the article on NewELA and highlight according to the prompts.
- Summarize the article- **At least one good paragraph.** 12pt font double spaced.
- Take the reading comprehension quiz.

★**NewsELA:** Electricity and Magnetism - located in Google Classroom/NewsELA = **20 Points**

- Highlight words you don't know in red, key claims/ideas in yellow, and evidence in blue.
- Write 2-3 questions you need clarification on these topics
- Summarize the article- **At least one good paragraph.** 12pt font double spaced.
- Take the reading comprehension quiz.

# Research

## ★ Magnetism Vocabulary = 20 Points

- You may use your notes above or the internet or a dictionary. **Make sure it is related to the science definition**
- Define the following terms:

- ☐ magnetism
- ☐ electric current
- ☐ magnetic substance
- ☐ electric field
- ☐ Magnetic Field
- ☐ Direct Current
- ☐ Alternating Current
- ☐ Static Electricity

- ☐ Electricity
- ☐ Electric charge
- ☐ Amp
- ☐ volt
- ☐ watt
- ☐ tesla
- ☐ electromagnetism

## ★ Take a Break = 10 Points

Put your phone away and go outside for at least 30 min.

- Go on a walk, go sit on a bench, take a notepad to write, do whatever.
- Just take some time to think without distraction and share your thoughts, what you saw, how you are feeling..... below.

# Explore

## ★ Household magnets = 30 Points

- Find as many magnets as you can in your house.
- Go outside and rub them in some dirt until you get some magnetic metals to adhere to them (get as much as possible). Take the magnetic pieces off of the magnet and put them on to a paper. Put your magnet on the other side of the paper and see how you can move them around. Take a picture of what you see. **You must include your face in at least one of them.** It should look something like these photos.

Your Photos:

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- Give an explanation of each picture using the vocabulary terms. You must use at least 5-10 vocabulary terms.

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## ★ Phet Simulation Magnets and Electromagnets = 30 Points

- Use the [Phet simulation](#) and fill in the [Google Doc](#) to go with it.
- You will have to make a copy of the [Google Doc](#) to edit it, and **MAKE SURE YOU ADD this doc to this assignment before you hit submit on Google Classroom.**
- Did you do this simulation?

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# Collaborate

★ **Office Hours: Discussion = 10 Points each** (may attend up to twice for credit but can attend more as needed)

- **You must have a question** (or many questions) about magnetism to ask during office hours.

**My office hours will be Tuesday and Thursday from 10:00-11:00 am.** You can request another time if that doesn't work for you. Use the link below to join in via Zoom. **You may also call in**, but you will be on speakerphone so whoever is on the Zoom meeting will hear your question(s).

- The link will also be in Google Classroom for you to use each time.

- **Write down your questions** and give me a **brief summary** of what you think of the meeting, what you learned, what we discussed, etc.

Your Questions:	Answers:
Summary of the meeting:	

# For Funsies

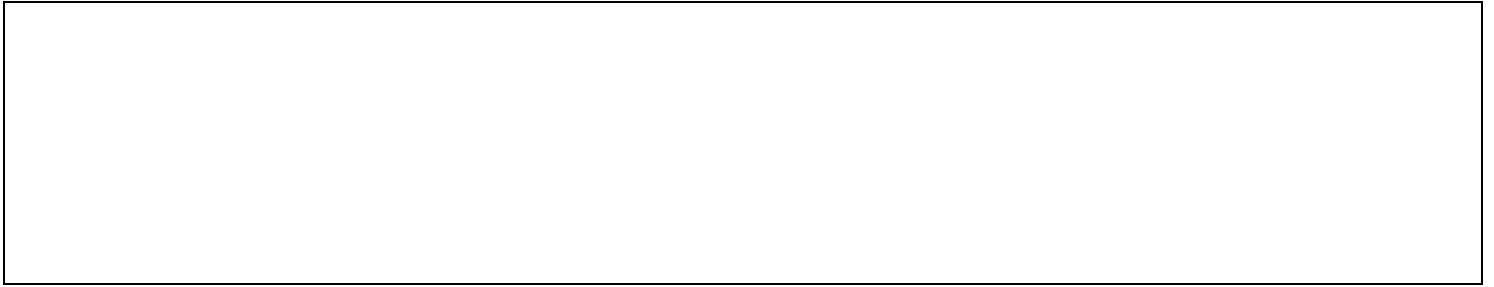


★ **NewsELA Article: Cowboy Hats Glued to Pigeons = 5 Points**

- Read the Cowboy Hats Glued to Pigeons NewsELA Article (Link in Google Classroom)

Answer the prompt and complete the quiz. Respond to the prompt below:

What do you think of this? Should it be a serious concern? Why or why not?



★ **Make a Meme** turn these photos into memes. **5 Points each**

- Keep it appropriate!
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# Evaluate



★ **CERS** (Claim, Evidence, Reasoning, So what?) = **30 points**

**(MUST BE COMPLETED TO RECEIVE CREDIT)**

How are magnets critical to our generation of electricity? What is the only way we generate electricity without magnets?

Answer the questions here on this document

- CLAIM - Explain what is happening? 1-2 sentences
- EVIDENCE - How is that happening? 5-6 sentences
- REASONING - Why is this happen? 5-6 sentences
- SO WHAT? - Why is this important? 3-4sentence