



INQUIRY UNIT PLAN

Gelsthorpe
BSWP 2017

DAY 1: SEE, THINK, WONDER

Look at the picture and ask yourself the following questions:

1. what do you see?
2. what do you think?
3. What do you wonder?

Independently answer these questions in your bell ringer section.



DAY 1: THE ESSENTIAL QUESTION

How essential is electricity to your every day life?

Think for a second and then write for about 2 minutes in response to this question.

Once the 2 minutes are up, start to think about the things in your house that use electricity.

We will use the inventory sheet to make a list of all the items in your house that use electricity.

DAY 2 (3): HOW ESSENTIAL ARE THEY?

- Using the list you created last night, ask yourself “Is this item essential or necessary for every day life?” OR “Do I need this item to survive?”
- Compile a list of a few items (less than 5) that you feel are essential to life.
- Talk to your table group. Each person will be researching 1 item. Use the guide I handed out to you to guide your research. You will present your findings to your table.

DAY 3, 4: DISCOVERY STATIONS

You will travel to each station and fill out the [investigation sheet](#) for each station. Use the [directions](#) at each table to guide your investigation.

1. Static Electricity
2. Circuits: Series
3. Circuits: Parallel
4. Ohm's Law using circuits
5. Insulators and Conductors
6. Magnetism
7. Electromagnetism/Generators

DAY 5: DE-BRIEFING THE STATIONS

- Today we will talk about our summaries and go over the stations.
- Make sure each summary has a title and tell me in 5-ish complete sentences what you learned from each station.

DAY 6: VIDEOS ON ELECTRICITY

Electric and Magnetic Fields:

<https://app.discoveryeducation.com/learn/videos/f86b8d23-d743-40f8-9162-d2b5e09c1cc6?hasLocalHost=false>

- Take notes while you watch.
- After the video you will create your own questions that you feel should go with this video. Try coming up with 5. We will use these later.

DAY 7 (8): GUEST SPEAKERS

- Listen to each of the guest speakers.
- During their presentation, answer the following questions:
 1. What is the main source of power?
 2. What are 3 pros to this type of energy source?
 3. What are 3 cons to this type of energy source?
 4. Which one do you want to know more about?
- You will be deciding what type of energy you'd like to use in your "system".

DAY 9-14: CULMINATING PROJECT

- Build your own electrical system, powered by a generator you build, that electrifies 6 houses.
- See project guide [here](#).
- You will have both group responsibilities and individual responsibilities.
- Here is the [rubric](#) you will be graded on at the end during the gallery tour.

DAY 15: GALLERY TOUR

- Gallery tour with a rubric guide.
- As you listen and learn about how other groups approached the project, write a positive note on the post-its provided. This will be the feedback they get from you.

CITED WORK

Electricity Picture: <http://hebasoffar.blogspot.com/2014/05/electricity.html>

BSD Curriculum:

https://drive.google.com/file/d/0B5mZp1M_sluESXcwYksxa2FpMWI5dHhWeVNFT3BSdmtJWUkw/view

Conductivity Lab: <http://www.cpalms.org/Public/PreviewResourceLesson/Preview/45852>

Generator Lab: http://amasci.com/coilgen/generator_1.html

Electric and Magnetic Fields FortunaPix, 2014. Full Video

Discovery Education. Web. 15/2/2017. <http://www.discoveryeducation.com>.

Project Rubric Scoring Guide:

<http://www.mychandlerschools.org/cms/lib6/AZ01001175/Centricity/Domain/6143/General%2005%20Point%20Rubric.pdf>