Slide A

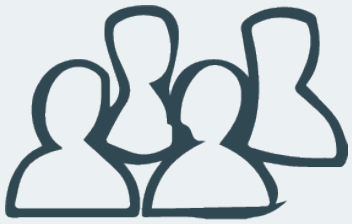
Warm Up 10/7

If you have a partner for the project, sit with them!

- Why is it important to create a grid that is reliable in cases of extreme weather (such as the Texas blackout of 2021)?

Slide A

Warm Up 10/8



If you have a partner for the project, sit with them!

- Which other two criteria did you choose as the most important and why?

10/15 Goals

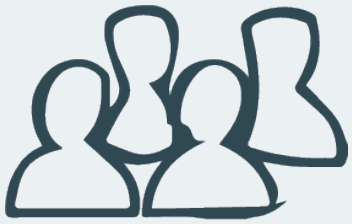
- Complete Energy Grid Solution (Part 3)
- Work on your Community Presentation Slides (Part 4)
- Energy Grid (Sheets), Energy Grid Handout (Doc) and Presentation Slides due WEDNESDAY

10/8 Goals

- Complete Part 1 and Part 2 and show your teacher
- Then you can move on to Part 3 after I go over it as a class

Slide A

Friday Goals

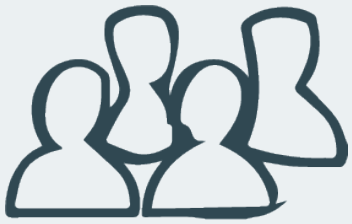


With your partner/by yourself

- Tell Mrs. Wentzloff who you are working with (or if you're by yourself)
- Complete Question 1
- Complete Question 2 under the "Current" tab
- Update the background information (in yellow) and explore the information it gives you

Slide A

Friday Goals



With your partner/by yourself

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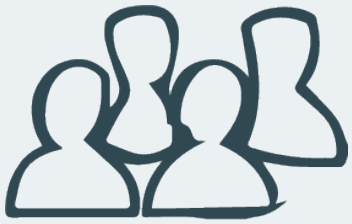
- Update the background information (in yellow) and explore the information it gives you

Slide A

Monday Goals



With your partner/by yourself

- Should already be completed: Question 1
- Due end of class
  - Complete Question 2 using the “Current” tab”
  - Update “Background Information”
- Tuesday- Question 3 (Solution), in class observation Investigation
- Wednesday-Friday- Complete Slides and turn in
- Slides due Friday!

Slide B

Orient to a New Tool

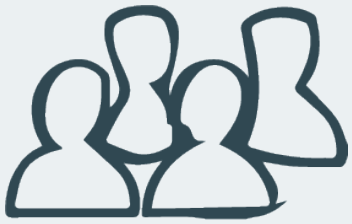
With your class

The Energy Grid Calculator can help us measure the success of a solution against a variety of criteria, such as cost, reliability, dispatchability, capacity, power, or environmental impact.

Explore this tool with your class using the prompts on the calculator.

Slide C

Our Design Challenge



With your group

Complete Q2 in the Design Challenge handout:

All forms of energy production and other resource extraction have associated costs and risks as well as benefits. Use evidence from our readings, data analysis, and the Energy Grid Calculator to make an argument for why our region's current grid solution has costs and risks associated with it, as well as benefits.

Orient to a New Tool

With your class

The Energy Grid Calculator can also help us simulate a design solution. You can:

- Demolish power plants.
- Build new power plants.
- Choose to winterize, and where to build.
- Add wiring upgrades and energy storage solutions.

Today In Class

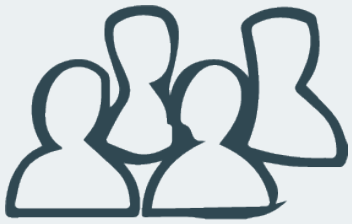
To Do

- Complete Question 2- I will be checking this and asking follow up questions for Investigation (if we did not chat yesterday)
- Complete your Design Solution
- Start your slides

Slides are due on THURSDAY on GC!

Slide E

Our Design Challenge



With your group

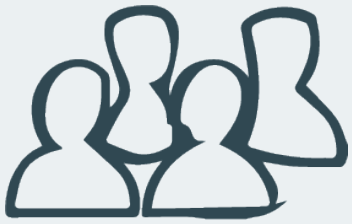
Use the “Solution” tab of the Energy Grid Calculator to make changes to the grid that reflect the criteria you chose in Part 1, and see what happens.

How do your changes affect the measures at the top of the sheet? What does that mean?

Discuss what you notice with your group.

Slide F

Our Design Challenge

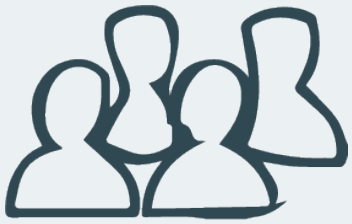


With your group

Complete Q3 in the Design Challenge handout (Q4 is optional but will help you communicate your solution).

Slide G

Our Design Challenge



With your group

Begin working on Part 3: *Communicating Your Plan.*

Be ready to describe your design solution to your classmates informally in 15 minutes.

Peer Feedback

With your group

Nominate half of your group to begin as ***strayers*** who will visit half of the other groups in the class. These strayers will spend 5 minutes at each group interacting with the ***stayers***:

- 3 minutes listening to the stayers
- 2 minutes for questions and feedback

After visiting half of the other groups, the stayers and strayers will switch roles. The new strayers will visit the other half of the groups.

Only 1 set of strayers should visit a set of stayers at a time.

Review Peer Feedback

1. Communicate the feedback each pair received on their ideas as stayers.
2. Decide whether you agree or disagree with the feedback, and talk with your group about why you agree or disagree.
3. Communicate the new ideas each pair got from their peers when they strayed.
4. Decide whether you agree or disagree with these new ideas, and talk with your group about why you agree or disagree.
5. Revise your work to address the feedback and new ideas.

Navigate

Stop and Jot

How did learning about your peers' ideas change your thinking about how complex it is to make these kinds of decisions for a community?

➔ Be ready to share your ideas with the class.

Slide K

Navigate

Home Learning

Complete the Peer Feedback Self-Assessment.

Navigate: Making Connections

Turn and Talk

- How did our investigations in this unit help us understand how to keep our energy systems **stable**, even as conditions **change**?
- How did our investigations in this unit help us build a foundation for understanding **energy conservation** and **energy transfer** that we can take forward into the rest of the year?

→ Be ready to share your ideas with the class

Evaluate Our Driving Question Board

With a partner

Compare your notes about which questions you think we've answered on our Driving Question Board.

Key:

- We did not answer this question or any parts of it yet: **?**
- Our class answered some parts of this question, or I think I could answer *some parts* of this question: ✓
- Our class answered this question, or using the ideas we have developed, I could now answer this question: ✓ ✓

Revisit Our DQB

With your class

- Which questions have we made the most progress on?
- What have we figured out?
- What can we say now about the question:

How can we design more reliable systems to meet our communities' energy needs?

Final Transfer Task

On your own

Complete the transfer task provided by your teacher.

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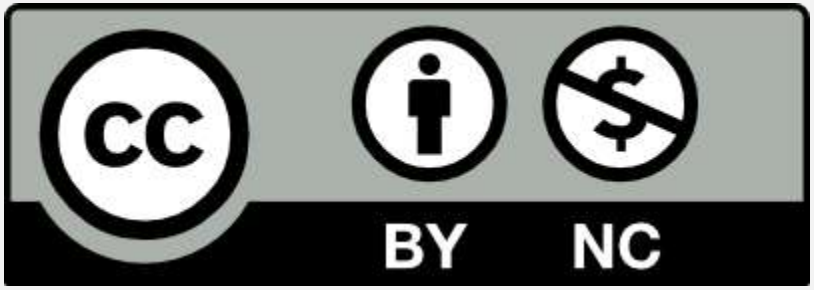

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