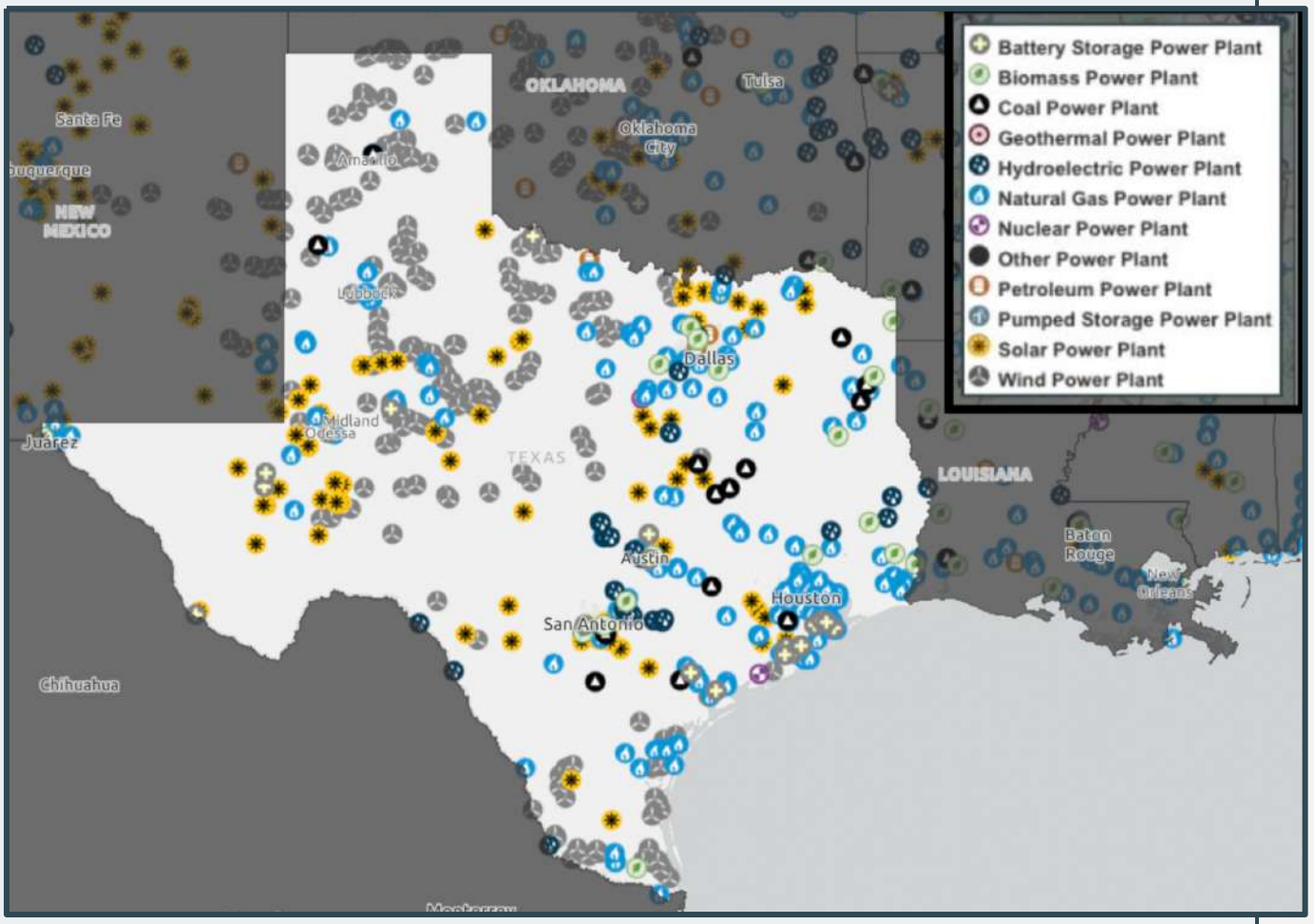
Slide B

Warm Up 9/18

What do you notice?

What do you wonder?



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Ranking Energy Source Cards

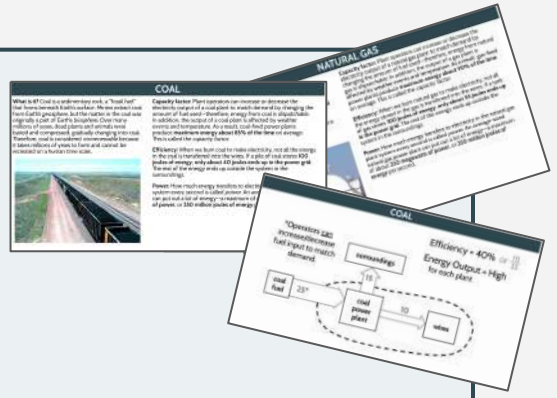
With your group

Inspect the energy source cards, front and back.

- From which of Earth's systems are most of these sources extracted?
- What clues can you find that might help us understand which sources were unreliable in February 2021?

Ranking Energy Sources

With your group

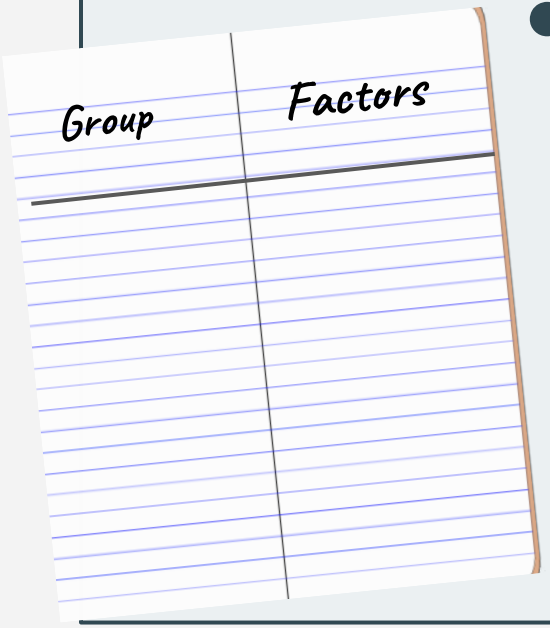


- Create a system of ranking for the categories presented to you. Remember our focus is to determine the overall most reliable energy source

Ranking Energy Sources Gallery Walk

With your group

- Look at the choices other groups made about how to rank the cards.
- As you walk, take notes: what factors do you think each group used to make their decisions?



Building Understanding

With your class

- What rankings did you see that differed from your group's rankings?
- Why do you think they made that decision?
- What factors are the most important f
think that?

Make a public record of the class's ideas.

Reliability

Turn and Talk

- What does it mean for an energy source to be *reliable*?
- Why is high reliability such an important *criterion* for making decisions about energy?

Be ready to share your ideas with the class, and add new words to your personal glossary.

Navigate

Exit Ticket

What additional data or information do we want to see that can help us figure out which energy sources contributed to the crisis in Texas in February 2021?

Intro to Data Collection

Exit Ticket

What additional data or information do we want to see that can help us figure out which energy sources contributed to the crisis in Texas in February 2021?

Navigate

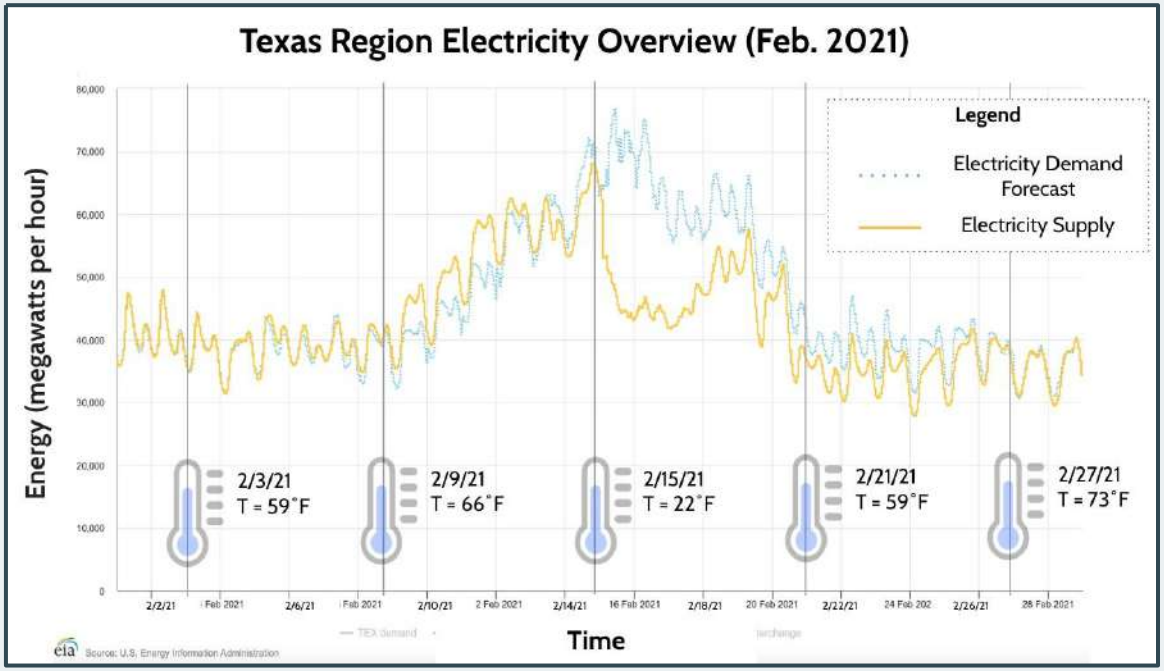
Turn and Talk

What data about energy in Texas in February 2021 could help us figure out what went wrong, and which sources contributed to the crisis?

Be ready to share your ideas with the class.

Slide K

Supply and Demand in Texas, February 2021



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With your class

What patterns would we expect to see from a source that contributed to the drop in supply?

Supply from Individual Sources

We will look at the supply from individual energy sources in Texas in February 2021.

With a new partner

Stand up and find a partner you have not worked with. After you do, raise your hands to get the data.

What do you notice in these graphs?

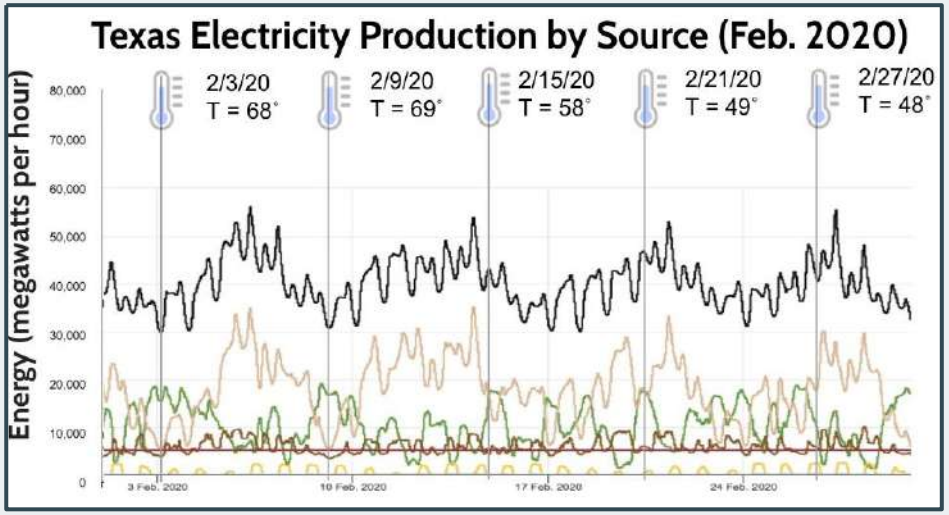
What does it mean?

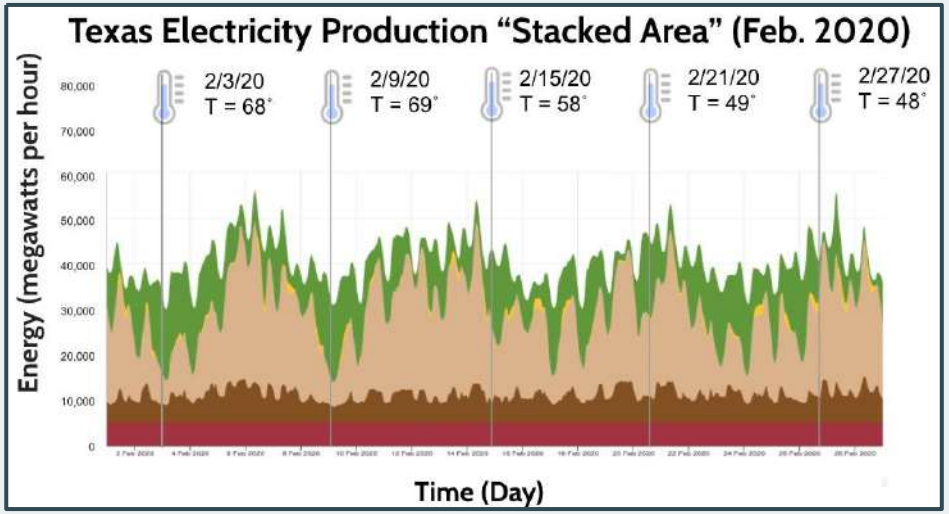
Be ready to share your ideas with the class.

Analyzing Graphs

With your class

What do you notice and wonder about the way these graphs present data?





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Analyzing Data from the Crisis

With a new partner

- **Stand up and find a partner you have not worked with.**
- Make a T-chart in your notebook like the one at left. Record patterns you notice for each month.
- How are the patterns in February 2021 (during the crisis) different from the patterns in February 2020 (when there was no crisis)?

Building Understanding

With your class

- How are the patterns in February 2021 different from the patterns in February 2020?
- How does this help us understand how each energy source may have contributed to the crisis?

Ranking Energy Source List

With your group

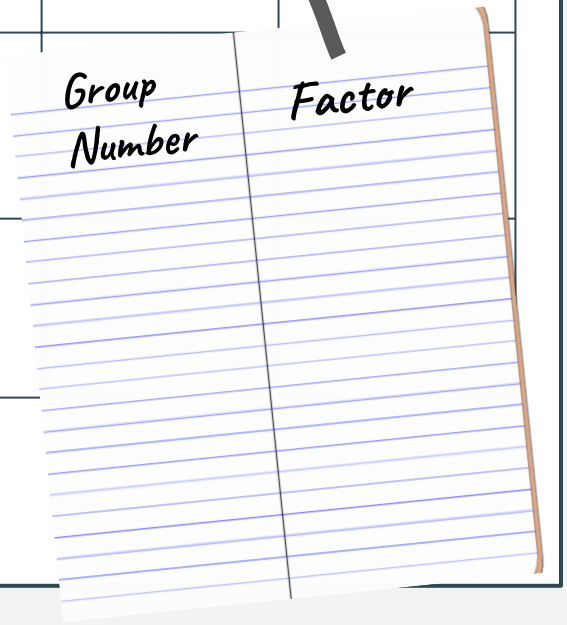
Based on our analysis of these charts, how would you change the way you ranked your cards?

Be ready to justify your changes.

Slide Q

Building a Decisions Matrix

Energy Source	Criterion #1	Criterion #2	Criterion #3	Criterion#4	Criterion #5	Criterion #6
	High reliability	*High _____ ?*	*Low _____ ?*			
Nuclear						
Natural gas						
Wind						



Revisiting Our Community Agreements

With your class

- How did your peers help *move your science thinking forward* today?
- Which Community Agreements should we prioritize in that category?
- What are some things we should consider next time to make sure our science thinking moves forward?

Navigate

With a partner

Look at the energy transfer diagrams on the energy source cards.

- What information is missing from these diagrams that could help us understand why some energy sources are more reliable (or efficient, powerful, dispatchable)?

Warm Up 9/23

- Sit with your groups for the Energy Source Cards
- Take out your energy source matrix handout
- Get a copy of the energy source cards for your group

Today we will do a share out task, turn in our papers and review the assignment from Friday.

Best/Worst Tent

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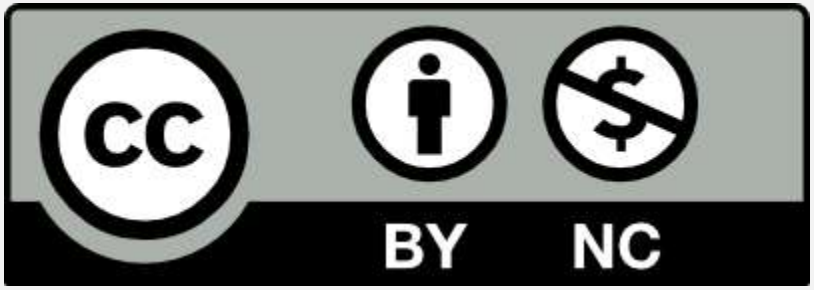

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