

Physics Unit 1

Energy Flow





Hour 1 New Partners

1. Christian, Savanna

2. Darren, Tiara

3. Helen, Quentin

4. Sanaa, Andrew

5. Drake, Melissa

6. Delaney, Donnie

7. Antonie, Jillian

8. Nathalia, Ryan

9. Bailey, Quincy

10. Edwin, Katherine

11. Faaris, Mia

12. Zion





Hour 2 New Partners

1. Kasander, Muhammed

2. Wally, Akshaya

3. Denzel, Garrett

4. Cameron, Lauren

5. Sydni, Cole

6. Brooke, Inora

7. Alisha, Sean

8. Sofia, Xavier

9. Paige, Connor

10. Lillian, Tyler

11. Trinity

12.





Hour 3 New Partners

1. Anish, Pal

2. Christian, Cady

3. Caleigh, Andrew

4. Dorian, Natalia

5. Brianna, Pranav

6. Madeline, Noah

7. Tony, Mia

8. Jack, Laura

9. Katelyn, Brooklyn

10. Kayla

11.

12.





Physics

Wednesday September 15



Agenda

- New Partners
- Intro to Unit 1

Warm Up

- What are some energy sources humans use for electricity?
- What does the state of Michigan primarily use?

Reminders

Data Summative
Past Due





Class Consensus

- Solar
- Hydraulics
- Wind
- Coal
- Natural Gas
- Fossil Fuels
- Nuclear
- Mechanical energy
- Gas





How Does This...





Turn Into This?



✱ Create a 2-3 slides to share with other groups.

- Summarize what your data tables and/or graphs tell you- put them in the slides
- Summarize 5 main points of your sources (total)





Partner Exploration





Group 1

Change in Energy Use
Where Do We Get Our
Energy From?





Groups 2

Low Carbon Sources
Low Carbon Countries





Group 3

Fossil Fuel Use
Coal Use
Oil Use





Groups 4, 5

Fossil Fuel Use
Natural Gas Use
Nuclear Use





Groups 6, 7

Renewable Use

Hydropower Use

Solar Use

Wind Use





Group 8

Michigan Energy

Sources





Group 9

Renewable Energy Around the World





Group 10, 11, 12



US Goals in
Renewable Energy

Overall State Goals





Physics

Thursday September 16



Agenda

- Present to Small Groups
- Unit 1 Materials
- Self Assess
- Electricity and Charges Choice
- Catch Up Day

Warm Up

- Open up your slides from yesterday
- 10 minutes to finish up with your partner!
- Take out your notebook and separate a page in half

Reminders

I will be gone tomorrow!

Work on Electricity Choice, CERs and Data Summative





Share Out

- Group with the lower number goes first
- 3 minutes to share your topic and slides
- The other group writes down a few things they learned
- Switch!





To Do Today

- Is It Science? CERs
- Data Summative
- Charges and Electricity Choice Boards

This is what you're working on Friday in class!





Physics

Monday, September 20



Agenda

- Unit 1 Materials (if needed)
- Charges and Electricity PhET Review
- Types of Energy
- Charges Stations

Warm Up

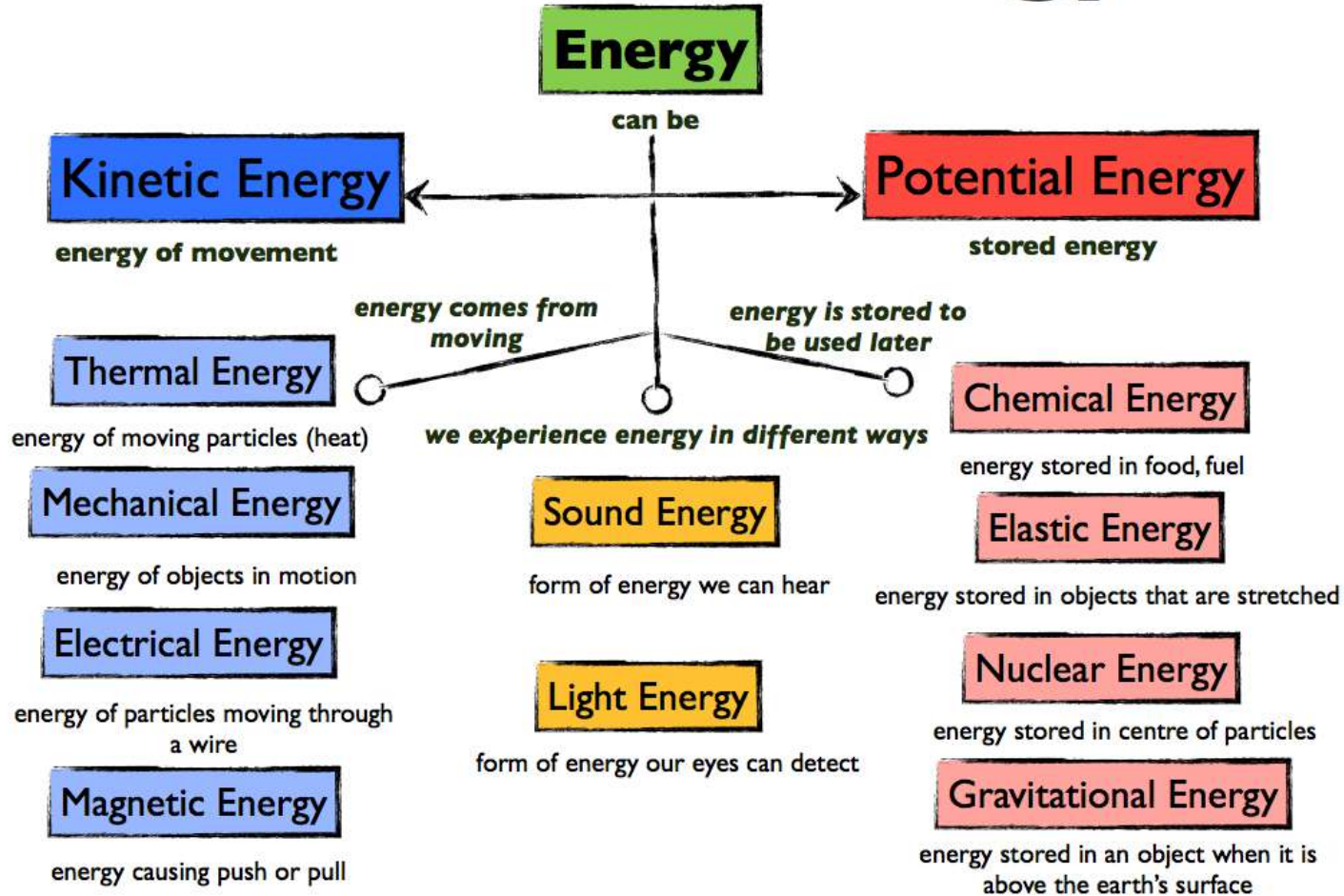
- Open up “Charges and Electricity PhET” on your device
- What is something you noticed from each of your simulations

Reminders

I will be grading tomorrow :)



Forms of Energy





Charges Stations

- Split notebook into 6 sections (each a half page)
- Get a balloon (1 per group)
 - Balloons are not toys and should stay in your hand the whole time
 - You will have one warning!
- Go to station
- 4 minutes at each station
- Model before and after and write down what happens





Physics

Monday, September 21



Agenda

- Charges Class
- Conclusions
- Evaluative Modeling Standards
- Circuits Day 1

Warm Up

- Take out your charges stations from yesterday
- Take out your calendar/standards sheet
- **No devices right now**

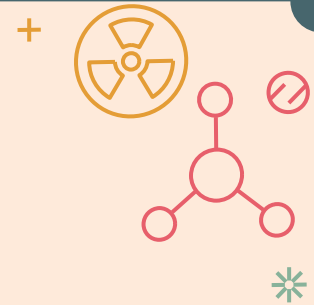
Reminders

- CER/Circuits Assessment Thursday in Class



Charges Stations

Class Conclusions



Station 1

- Charged a balloon
- Hole punches
 - Lifted up

Station 4

- Charged balloon
- Near stream of water
- attracted/bent towards

Station 2

- Charged 2 balloons
- Moved them together
- Both charged- repelled
- One charged- attracted

Station 5

- Charged balloon
- Moving ping pong ball

Station 3

- Charged balloon
- Salt- attracted
- Pepper and salt-pepper attracted

Station 6

- Charged balloon
- Aluminum stuck to balloon
- Yarn and pipe cleaner *



Physics

Wednesday, September 22



Agenda

- Circuit Exploration Day 1 and Day 2

Warm Up

- Open up the Circuit Exploration Day 1 and 2 on your device
- Take out your notebook and models from yesterday.

Reminders

- CER/Circuits Assessment **Friday in Class**





Physics

Thursday, September 23



Agenda

- 15 Minutes for wrap up
- Circuit Exploration Day 1 and Day 2 Conclusions
- Practice for CER/Modeling Assessment

Warm Up

- Take out your device and open up Circuit Exploration Slides
- Take out your observations and conclusions from Day 1 and Day 2

Reminders

- CER/Modeling Assessment
Friday in Class





Physics

Friday, September 24



Agenda

- CER & Modeling Assessment



Warm Up

- Take out your notebook or grab a blank piece of paper or two for your CER.
- Open up Circuit Exploration on your device.

Reminders

- Turbine Project Starts Tuesday. Choose a group of 1, 2 or 3





Physics

Monday, September 27



Agenda

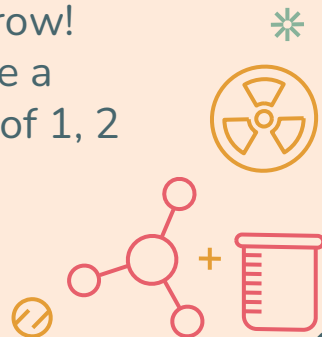
- Circuit/E&M Exploration Day 3
- Work Time on Modeling/CER Assessment

Warm Up

- Reflect on how you are doing in this class so far.
- What have you been doing well?
- What do you need to improve on?
- Why are you a good partner/group member?

Reminders

- Modeling/CER Assessment due Today!
- Turbine Project Starts tomorrow! Choose a group of 1, 2 or 3





A Few Reminders...

- If you miss class, please reach out to me about what you are missing. It is your responsibility to make up work outside of class!
- Can I resubmit work? Yes
- If something is missing or past due, can I turn it in? Yes





Physics

Tuesday, September 28



Agenda

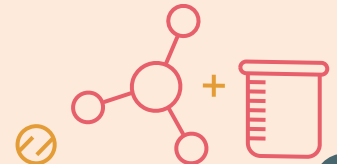
- Intro to Turbine Project
- Choose Groups
- Background Day

Warm Up

Take out your device and load the Turbine Project on Google Classroom.

Reminders

- Starting tomorrow, we meet in the lab every day.
- Bring in materials for tomorrow





To Do Tuesday

- Tell Mrs. Wentzloff your group of 1, 2 and 3 and get lab number
- Go next door to your lab station to work
- Work on Background Questions
- Format your Google Doc Report
- Set a reminder to get materials





Wednesday Goals

- Label Drawer with Tape (at your station)
- Work on your first iteration
- At least 1 Teacher Meeting this week
- Daily Logs Every Day!





Physics

Thursday, October 7



Agenda

- Return CERs
- Standards/Grading Reminders
- Report and Final Design
- Build Day

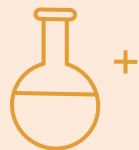
Warm Up

Open up the
Turbine Report
Requirements on
GC

Reminders

- Last Build Day is Friday!
- All Unit 0/1 LATE assessments due by next Friday





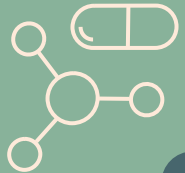
Detail	Date Due	Assigned	Assignment	Pts Possible	Score	Scored As	Extra Credit	Not Graded	Comments
	09/24/2021	09/24/2021	1.1 Energy Flow	4	4			✓	Turbine Project
	09/24/2021	09/24/2021	S.6.2 Analyze patterns and trends	4	4			✓	Turbine Project
	09/24/2021	09/24/2021	S.6.3 Sources of Error	4	4			✓	Turbine Project
	09/24/2021	09/24/2021	1.2 Charges and Circuits Outcomes	4	2.8	2- Functional understanding towards proficiency			CER/Modeling Assessment Charges and Circuits
	09/24/2021	09/24/2021	S.3.1: Modeling Details	4	2.8	2- Functional understanding towards proficiency			CER/Modeling Assessment Charges and Circuits
	09/24/2021	09/24/2021	S.3.3 Modeling Student Thinking	4	3.6	3- Proficiency			CER/Modeling Assessment Charges and Circuits
	09/02/2021	09/02/2021	S.6.2 Appropriate Display of Data	4	3.2	2.5 - Functional understanding almost proficiency			Graphing and Measurements Summative due 9/13
	08/23/2021	08/23/2021	S.4.1 Argumentation: Claim	4	2.4	1- Understanding with Support			Reassessed through Modeling/CER Assessment
	08/23/2021	08/23/2021	S.4.2 Argumentation: Evidence	4	2.4	1- Understanding with Support			Reassessed through Modeling/CER Assessment
	08/23/2021	08/23/2021	S.4.3 Argumentation: Reasoning	4	2.4	1- Understanding with Support			Reassessed through Modeling/CER Assessment





Meet in Lab →

Leave backpacks in
here.





Xello Completed

- Make sure...
 - All lessons are done and passed (you may need to redo them)
 - EDP Packet Uploaded to Xello and the assignment on Google Classroom
 - Show me
 - Email deanna.johnson@avondaleschools.org that you have completed the EDP requirements
- The following students need to complete...
 - **Sydni** (lesson, GC Upload, Xello Upload), **Muhammed** (11th grade grade careers quiz, GC Upload, Xello Upload), **Connor** (GC Upload)





Monday, October 11

- Report is due Wednesday
 - Only one partner needs to turn it in on Google Classroom
 - The other partner(s) can click completed
- Please sit with your partner/group in the classroom
- If you need to build next door, please tell your teacher.
- Today we will review...
 - Scale Drawing
 - Sources of Error
- Thursday we start Unit 2! All building/testing must be completed by Wednesday (in or outside of class)
- Last teacher meeting Tuesday or Wednesday





Tuesday, October 12

- Report is due Wednesday
 - Only one partner needs to turn it in on Google Classroom
 - The other partner(s) can click completed
- If you need to build next door, please tell your teacher.
- Thursday we start Unit 2! All building/testing must be completed by Wednesday (in or outside of class)
- Last teacher meeting today or Wednesday. Please come up when you're ready!





Wednesday, October 13

- Report is due Wednesday (TODAY!)
 - Only one partner needs to turn it in on Google Classroom
 - The other partner(s) click completed
- If you need to build next door, please tell your teacher.
- Tomorrow we start Unit 2! All building/testing must be completed by Wednesday (in or outside of class).
- Last teacher meeting TODAY!

