

# Students will identify and describe

**Directions:**  
The graphs on the side represent the potential, kinetic, and total energy in the system for the rollercoaster. Place them under the correct letter to show how the energy in the system changes over the course of the ride

**Potential**

**Kinetic Energy**

**Where was the kinetic energy the greatest?**

Add text

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**Directions:**  
- Fill in the definition  
- Drag the soccer balls below into the appropriate places

**Definition of kinetic Energy**

Add text

**Potential**

**Kinetic Energy**

**Conservation of Energy**

**Wrap Up**

**Directions:**  
1. Place the red soccer ball on the letter where the kinetic energy would be the greatest  
2. Place the black soccer ball on the letter where the kinetic energy would be the least

**Definition of kinetic Energy**

Add text

**Potential**

**Kinetic Energy**

**Conservation of Energy**

**Wrap Up**

**Directions:**  
1. Place the red soccer ball on the letter where the kinetic energy would be the greatest  
2. Place the black soccer ball on the letter where the kinetic energy would be the least

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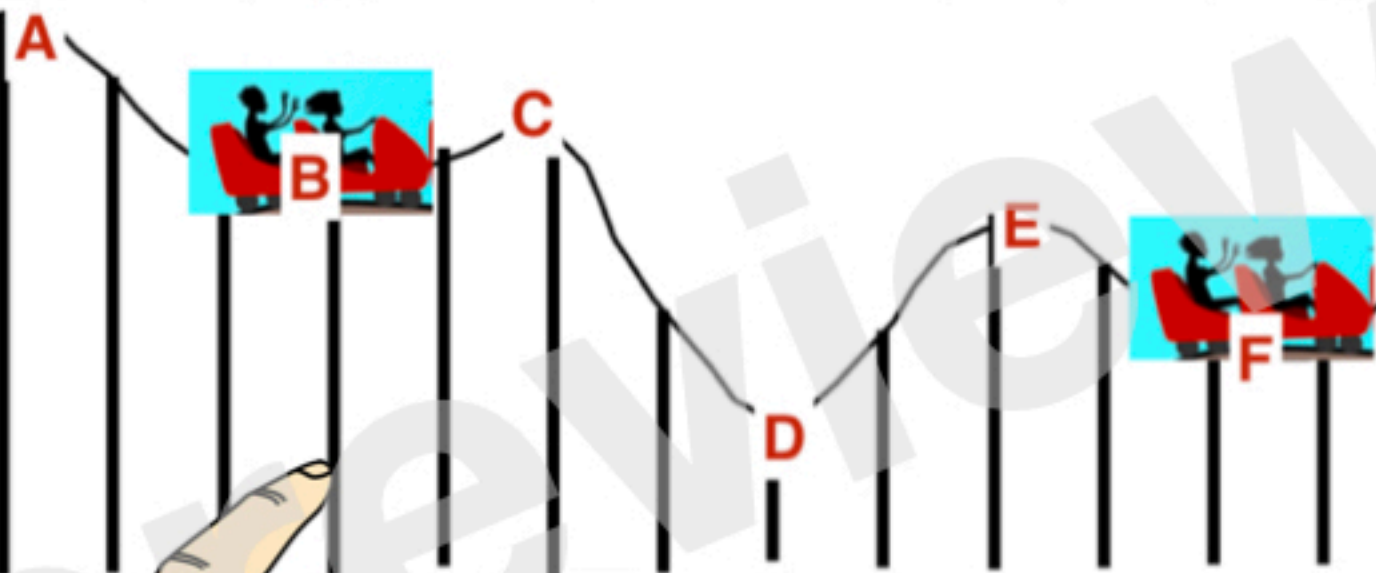
# Students will calculate and analyze

## Directions:

- Fill in the definition
- Answer the questions at the bottom

## Definition of Conservation of Energy

Energy cannot be created or destroyed, it just changes form.



## Directions: Answer the questions below

If the total energy of the system was 15 J, how much potential energy would the cart at letter B have if it had 3 J of kinetic energy?

Answer  
12 J

If the total energy of the system was 12 J, how much potential energy would the cart at letter F have if it had 4 J of kinetic energy?

Answer  
8 J

What happens to the potential energy as the roller coaster cart moves down the hills?

Answer  
As the roller coaster cart moves down the hills the potential energy is converted into kinetic energy.

Potential Energy

Kinetic Energy

Conservation of Energy

Wrap Up

Acids and Bases



# Teacher directions and answer key provided

**Directions:**  
The graphs on the side represent the potential, kinetic, and total energy in the system for the roller coaster. Place them under the correct letter to show how the energy in the system changes over the course of the ride

A

B

D

E

**Where was the kinetic energy the greatest?**

The kinetic energy was greatest at point B, where the potential energy was the lowest. At this point, the potential energy was changed into kinetic energy.

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**Directions:**  
- Fill in the definition  
- Drag the kids below into the appropriate places

**Definition of Potential Energy**

Energy of an object based on its position. The higher the object, the more potential energy it contains.

**Directions: Place the kids on the correct letter to match their potential energy.**

Highest

Lowest

second Highest

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# Teachers: click on the titles in the red box to download the digital notebook to their google drive

## Teachers Guide

### What You Will Need To Get Started:

1. Download link for the Google Resource

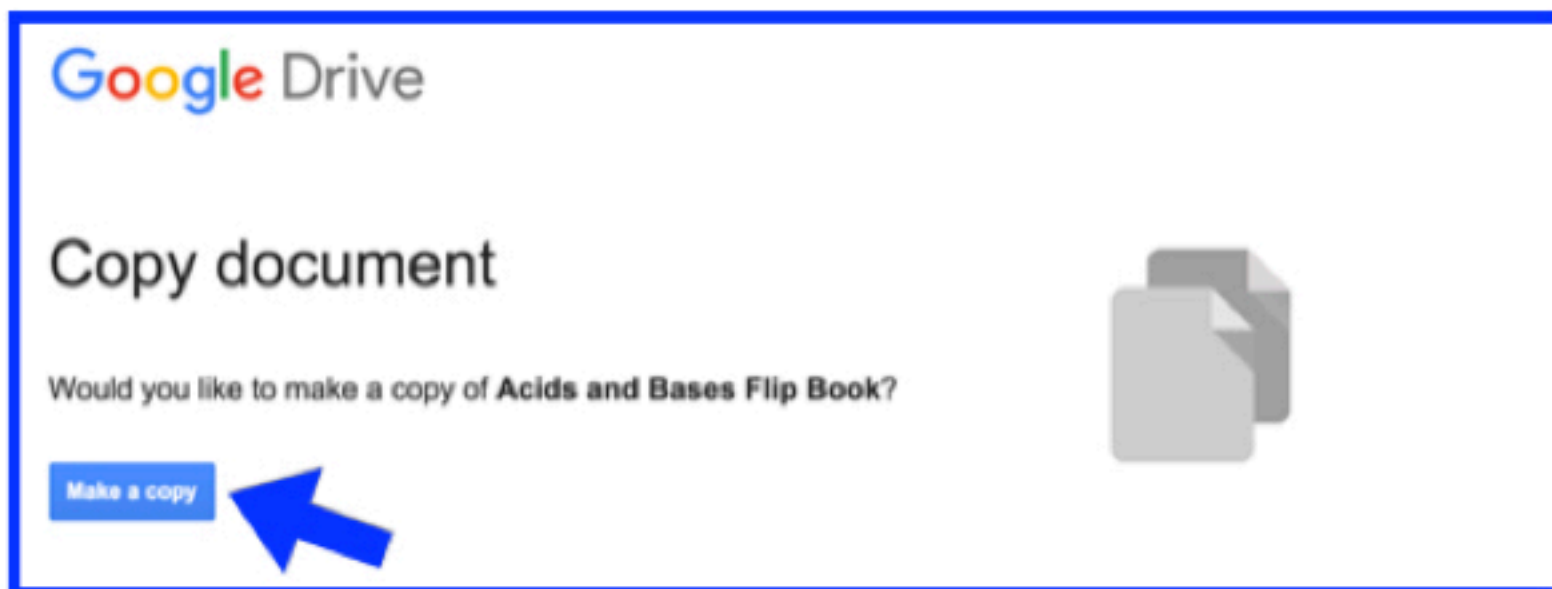
**Cell Cycle Digital Interactive Notebook Student**

**Cell Cycle Digital Interactive Notebook Teacher**

2. Access to the Internet and a Google Account (Free)

3. Google accounts or Microsoft OneDrive accounts for your students to save their work

4. Open the file on your Google Drive. The link will prompt you to make a copy



5. This new copy is now yours to edit and share with your students

6. Printer access if you choose to print the finished product as an actual flip book

# Teacher directions on how to share with students in google classroom, microsoft one drive, or any other LMS

## How to use this resource with your student:

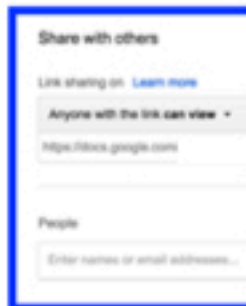
### Google Directions:

1. After you have made your own copy of the resource from the link, you will want to make a copy for your student.

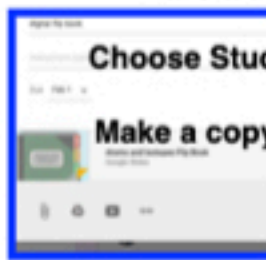
-Some options for this

- A. Give the students the link to your resource and make it "view only" this will allow students to make their own copies without affecting the original. To do this go to the blue SHARE button in the top right corner >get shareable link> choose people with a link can view > copy the link

- **Remember**, when sharing a link on an open class



- B. Use google resource to make a copy



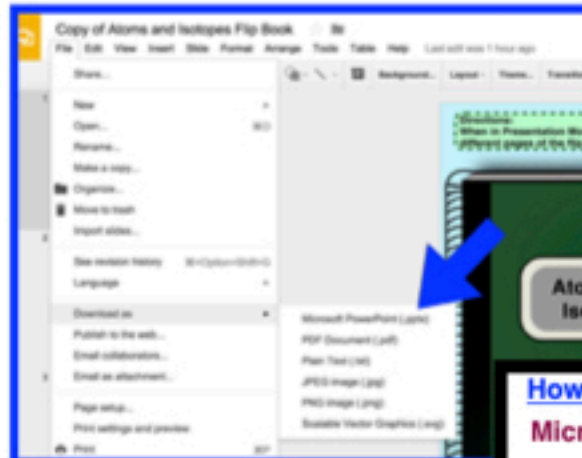
2. Students will be able to automatically save.

3. Students may share

## How to use this resource with your student:

### Microsoft OneDrive Directions:

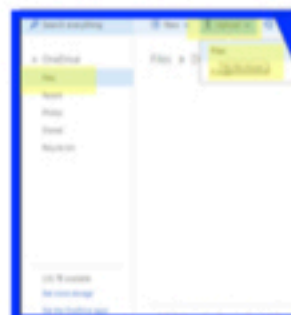
1. After you have made your own copy of the resource from the link, you will need to download your copy as a ppt to your desktop. To do this from the menu to FILE > Download as > Microsoft PowerPoint (.pptx)



2. Open your OneDrive. Create a folder for this step is recommended to keep you and your



3. From the menu, select Upload > Files from your computer or select the file and upload



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## How to use this resource with your student:

### Microsoft OneDrive Directions:

4. Make sure that you open the resource to make sure it is in good working order before sharing it with your students.

5. You will want to interact with the digital flip book in the "edit mode". This allows you to add their own text and move the pieces.

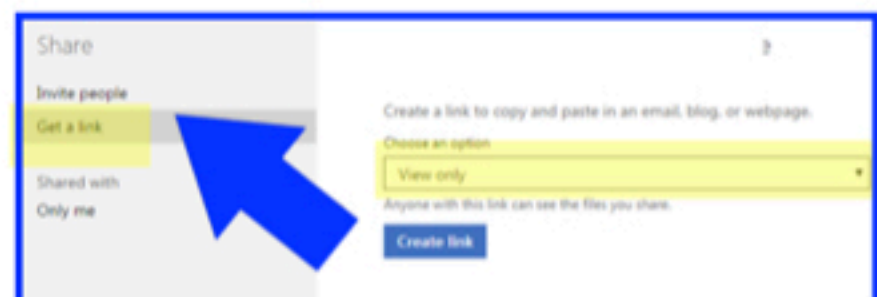
6. You will be prompted to choose to edit the file in PowerPoint or online. Select online. It will then open in a browser.

7. Follow your normal steps in sharing the file with your students. Go to Share > Share with people



8. Choose the option to view only. Then require your students to make a copy in their own drive before editing the file. This ensures your students do not edit your file.

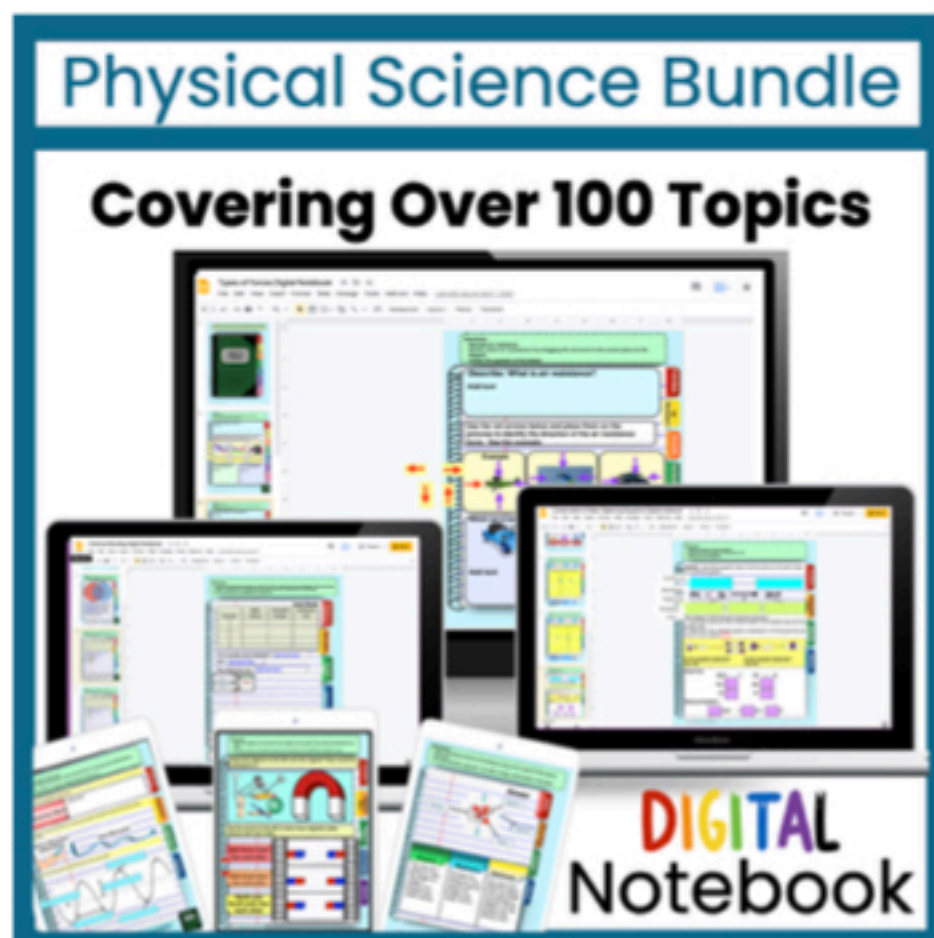
- **Remember**, when sharing your link with your students make sure it is a secure format that requires a log in password and not on a personal, school, or district that can be accessed by anyone



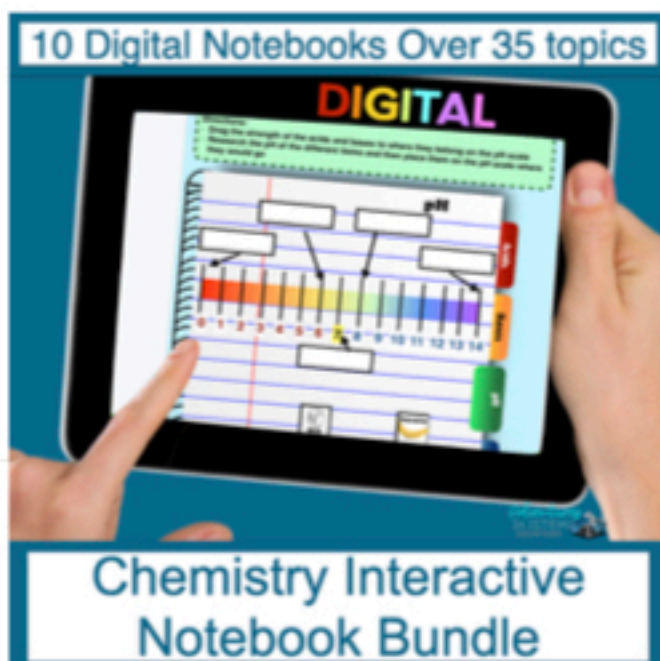




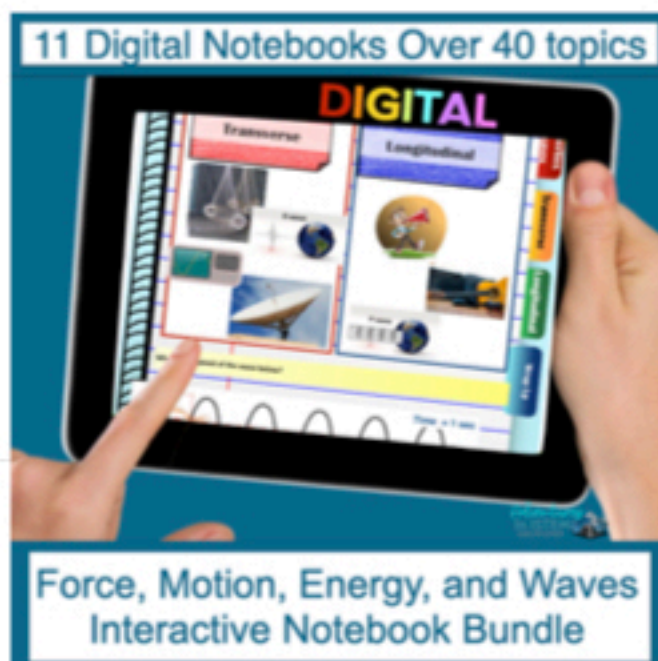
# Save Money and Grab a Bundle



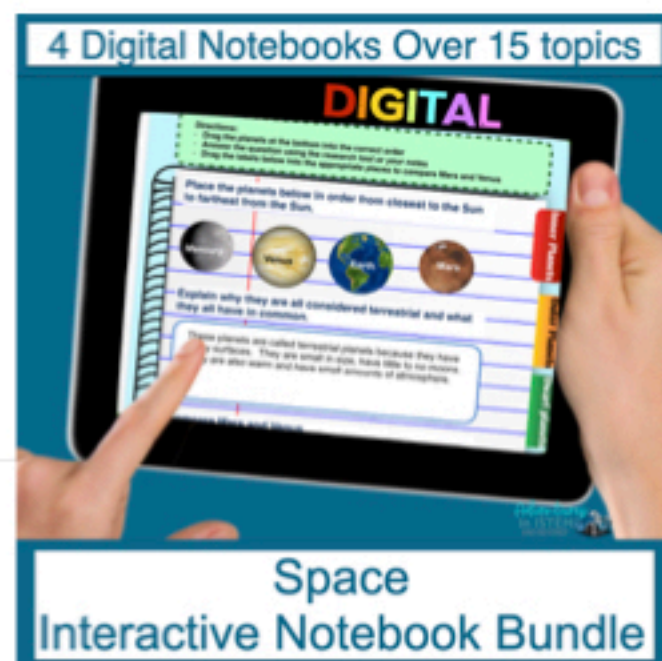
Years worth of digital notebooks covering over 100 physical science topics.



10 digital notebooks covering over 35 chemistry topics.



11 digital notebooks covering over 35 physics topics.



4 digital notebooks covering over 35 space topics.





# Teaching STEM Through Inquiry

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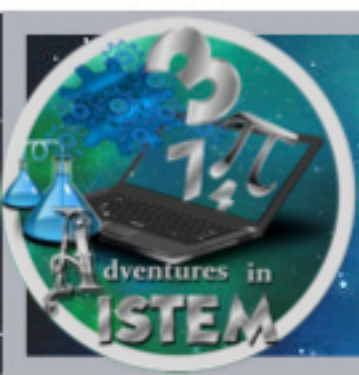
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## Special Thanks

Pixabay



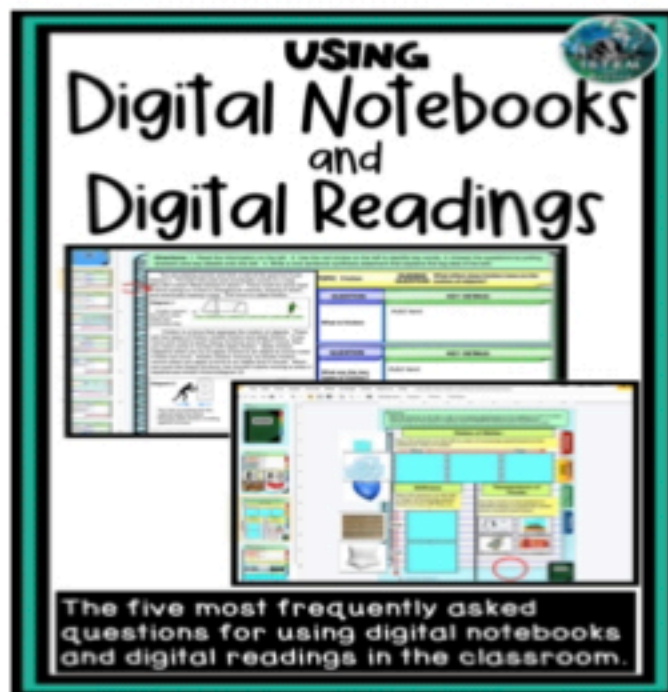




# Digital Resources

## Using Digital Products?

If you are new to using digital lessons than I recommend to check out my blog post that contains the most frequently asked questions. Click the picture for the link.



I would also recommend checking out my Google Slide videos that demonstrate how to drag and drop pieces, write in the text boxes, add objects, and more. These are short videos that can easily be shared with students and parents. Click the picture for the link

