

**SECTIONS: 4A,B,C,D,E**

DATE	HOMEWORK	PARENT SIGNATURE
Monday	→ Complete "Forms of Energy Practice"	
Tuesday	→ Complete "Forms of Energy Practice: Potential and Kinetic"	
Wednesday	→ No Homework-Science Fair Night	
Thursday	→ No Homework-Nutcracker Field Trip	
Friday	→ Complete "Forms of Energy Practice: Potential and Kinetic" (rollercoaster image)	

**Reminders**

- **Parents:** Don't forget to initial your child's HW Cover Sheet every night.
- **HW due Monday, December 9th**
- **Science Fair Night is Wednesday, December 4th @ 6:00pm**

**SCIENCE VOCABULARY**

- ! **Light energy:** energy that travels in electromagnetic waves and may travel in space
- ! **Heat energy:** energy produced from the movement of molecules
- ! **Sound energy:** energy produced by sound vibrations
- ! **Electrical energy (electricity):** is produced from the flow of an electric current through a conductor
- ! **Mechanical energy:** energy gained by the physical movement in position of an object
- ! **Trough:** the lowest point on a wave
- ! **Crest:** the highest point on a wave
- ! **Wavelength:** the distance between one crest and the next crest
- ! **Frequency:** the number of waves that pass a particular point in a given amount of time
- ! **Pitch:** how high or low a sound seems

Name: \_\_\_\_\_

## Forms of Energy Practice

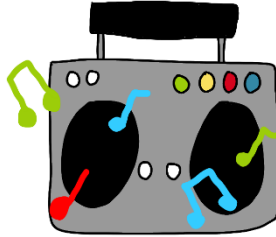
Label each picture below with the correct type of energy that makes the most change. Each energy is one used once. If you see more than one type of energy in a picture, circle it!

Mechanical   Sound   Electrical   Light   Heat   Chemical

1. \_\_\_\_\_



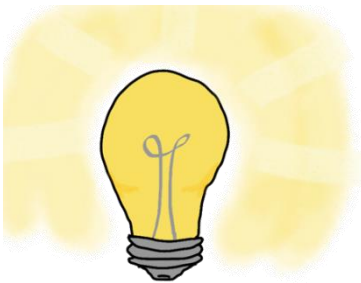
2. \_\_\_\_\_



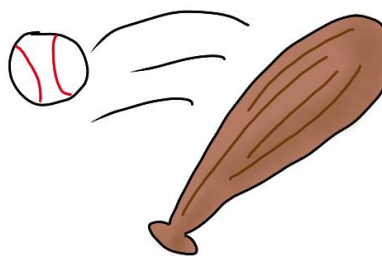
3. \_\_\_\_\_



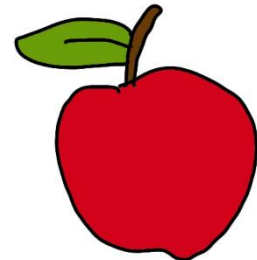
4. \_\_\_\_\_



5. \_\_\_\_\_



6. \_\_\_\_\_



7. Did you circle any pictures for having more than one type of energy present? Write about one that you circled and state what other energy is present.

\_\_\_\_\_

\_\_\_\_\_

8. How would you describe chemical energy?

\_\_\_\_\_

\_\_\_\_\_

9. Write about how you were able to identify the type of energy present in picture 5.

\_\_\_\_\_

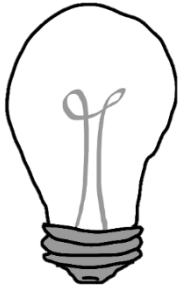
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Name: \_\_\_\_\_

## Forms of Energy Practice- Potential and Kinetic

Label each picture as either having potential energy or kinetic energy.

1. \_\_\_\_\_



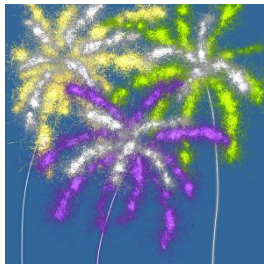
2. \_\_\_\_\_



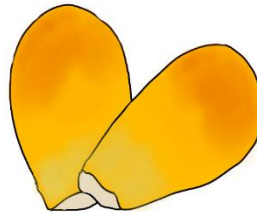
3. \_\_\_\_\_



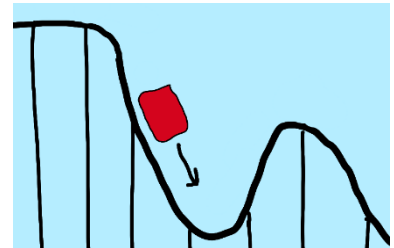
4. \_\_\_\_\_



5. \_\_\_\_\_



6. \_\_\_\_\_



7. Explain how you knew if picture 2 was potential or kinetic.

\_\_\_\_\_

\_\_\_\_\_

8. What will happen if we add heat to the popcorn kernels in picture 5?

\_\_\_\_\_

\_\_\_\_\_

9. Choose one of the pictures above that you labeled as potential energy and tell how you can turn it into kinetic energy.

\_\_\_\_\_

\_\_\_\_\_

10. How do we give more potential energy to the roller coaster cart?

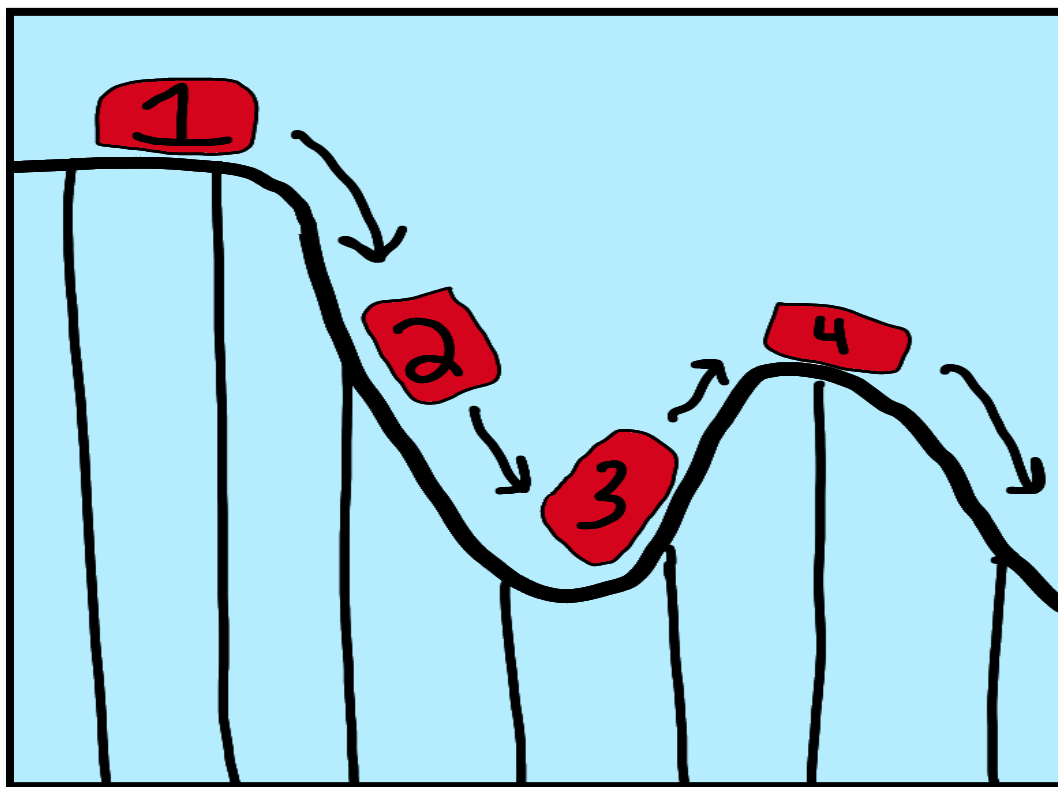
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Name: \_\_\_\_\_

## Forms of Energy Practice- Potential and Kinetic

Use the diagram below to answer the questions that follow.



1. Which 2 roller coaster carts have the most potential energy?

2. Out of those 2 carts, which cart has the most potential energy overall?

3. How would you describe the energy of roller coaster Cart 2?

4. Define, in your own words, potential energy:

5. Define, in your own words, kinetic energy: