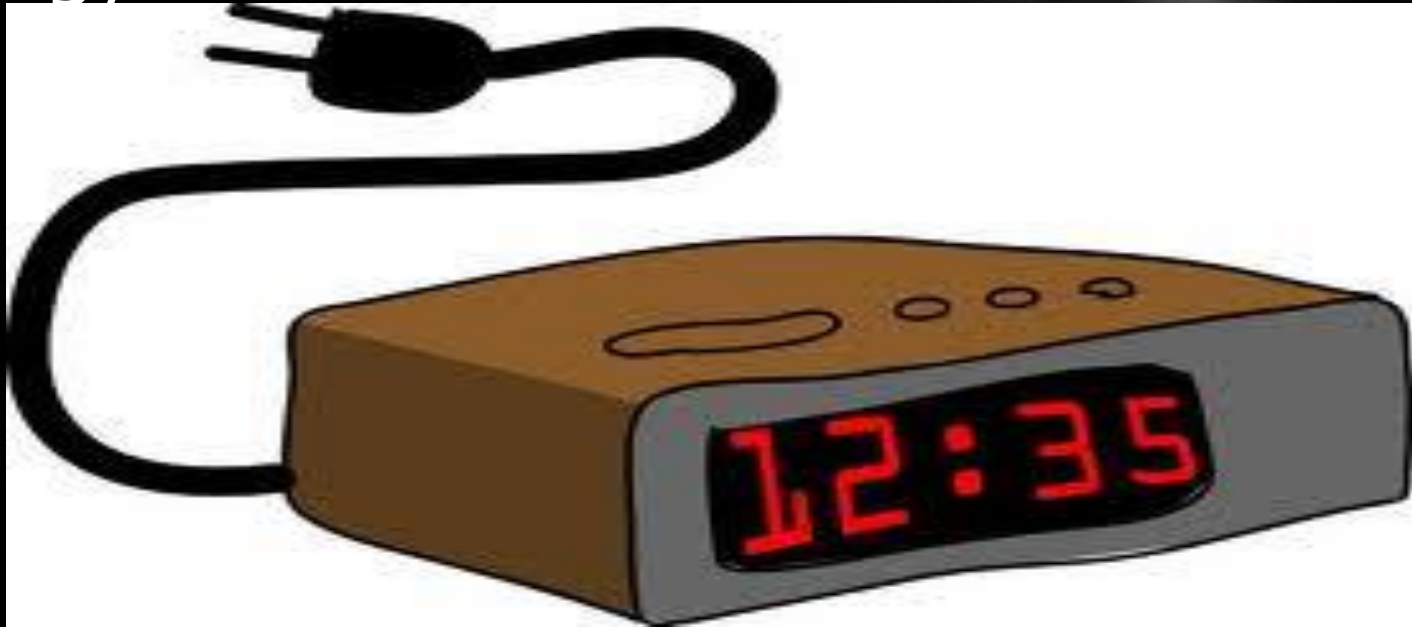


# Energy Transformations

1. *Use this presentation to answer the questions on your Energy Transformations worksheet.*
2. *Discuss your answer choices with your shoulder partner and then record your answer on your worksheet.*
3. *After you have selected your answers, use the Reflection boxes to discuss what you learned.*

1. When an alarm clock that is plugged into the wall goes off to wake you up, what energy transformation occurs?



- A. electrical  $\rightarrow$  heat  $\rightarrow$  sound
- B. electrical  $\rightarrow$  light  $\rightarrow$  sound
- C. electrical  $\rightarrow$  chemical  $\rightarrow$  light
- D. chemical  $\rightarrow$  electrical  $\rightarrow$  mechanical

2. You unplug your cell phone after it has been charged and all of the sudden, it starts to ring. What energy transformation occurs?



- A. electrical  $\rightarrow$  heat  $\rightarrow$  sound
- B. electrical  $\rightarrow$  sound  $\rightarrow$  light
- C. chemical  $\rightarrow$  mechanical  $\rightarrow$  light
- D. chemical  $\rightarrow$  electrical  $\rightarrow$  sound



3. You and your friend are roasting marshmallows to make S'mores and eating them, which is showing what energy transformation?

A. electrical  $\rightarrow$  heat  $\rightarrow$  light

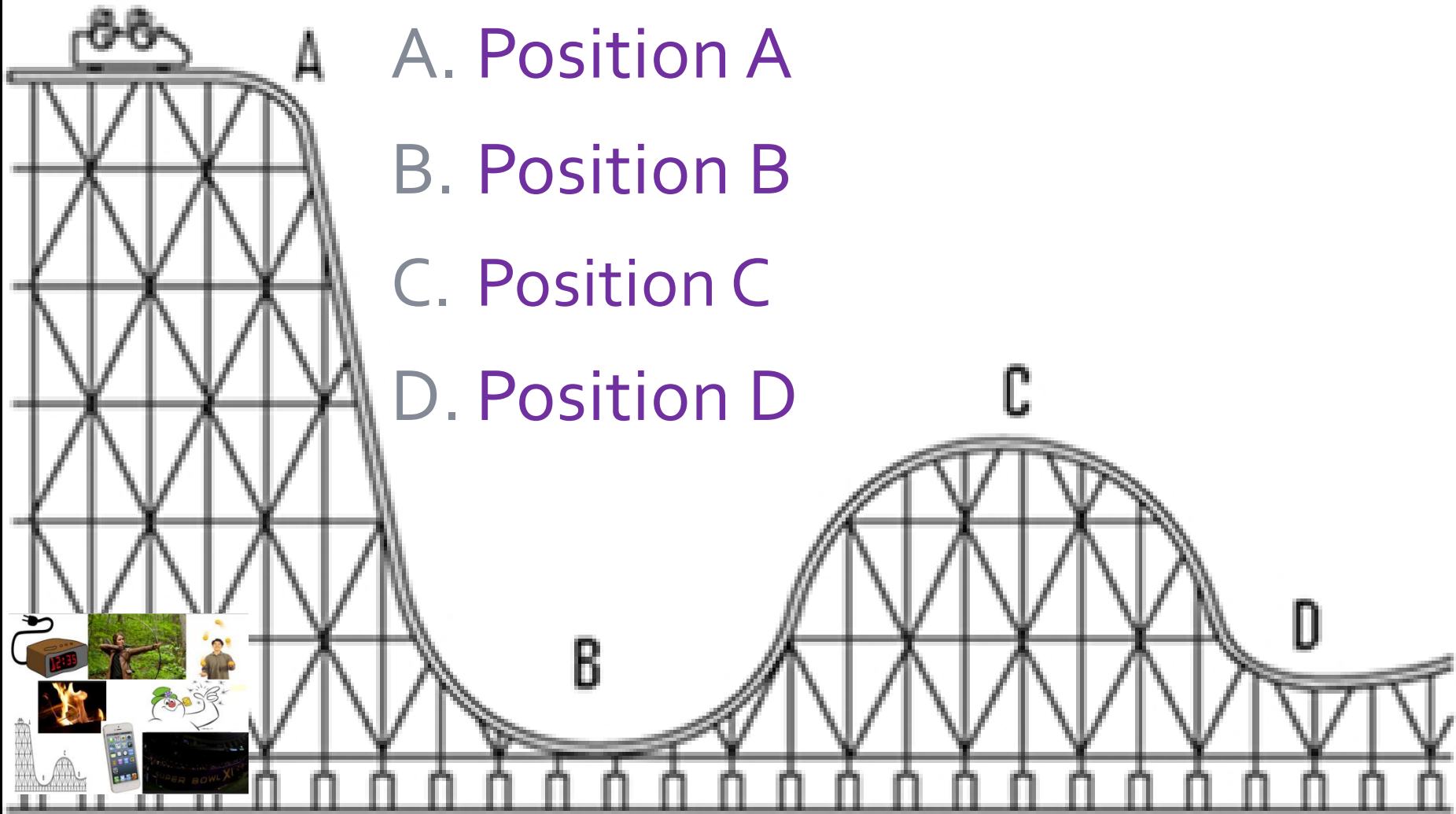
B. sound  $\rightarrow$  mechanical  $\rightarrow$  chemical

C. light  $\rightarrow$  heat  $\rightarrow$  kinetic

D. heat  $\rightarrow$  chemical  $\rightarrow$  sound



# 4. Which position on the roller coaster has the most potential energy?





**5. When Katniss hunts with her bow and arrow, what energy transformation happens when she shoots at her prey?**

- 
- A background image of Katniss Everdeen from 'The Hunger Games' aiming her bow in a forest. She is wearing a brown leather jacket and has a quiver of arrows on her back. The forest is lush with green foliage.
- A. chemical → heat → mechanical**
  - B. kinetic → potential → sound**
  - C. mechanical → heat → light**
  - D. potential → kinetic → sound**

6. At which position does the ball have the most potential energy?

- A. When the boy prepares to throw it
- B. When the ball rises
- C. When the ball switches from rising to falling
- D. When the ball falls back to the boys hand





7. When Frosty begins to melt, the following energy transformation occurs:



- A. chemical  $\rightarrow$  heat  $\rightarrow$  solar
- B. solar  $\rightarrow$  heat  $\rightarrow$  kinetic
- C. light  $\rightarrow$  chemical  $\rightarrow$  heat
- D. potential  $\rightarrow$  sound  $\rightarrow$  heat



8. When the power went out at the Super Bowl last year, what happened?

- A. The electricity was destroyed and went away
- B. The electricity was transformed to potential energy and then back to electric energy
- C. The electricity was destroyed and had to be created again



## Energy Transformation Activity Answers

1. B
2. B
3. D
4. A
5. D
6. C
7. B

**After you review your answer choices, go back and complete the reflection part of your worksheet. You may discuss your answers and the reflection with your shoulder partner. 😊**