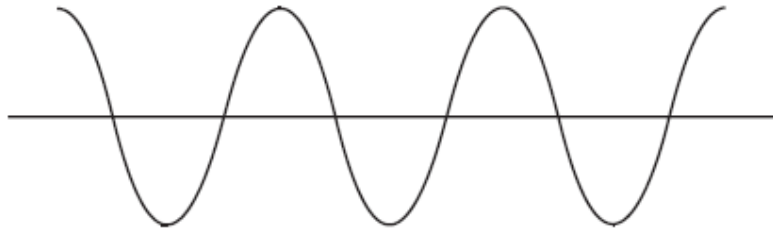
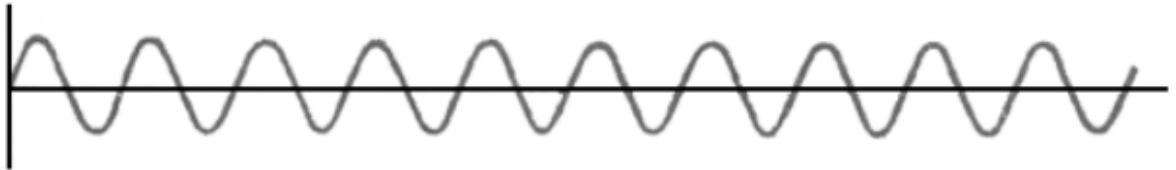


Changes In Wave Properties: Sorting Activity Images

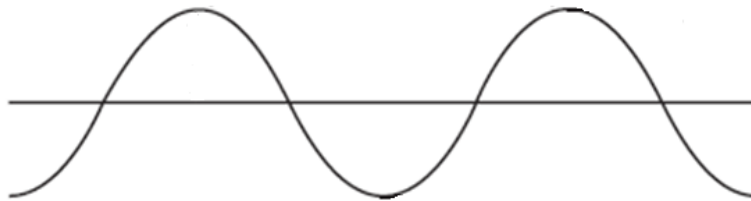
#1



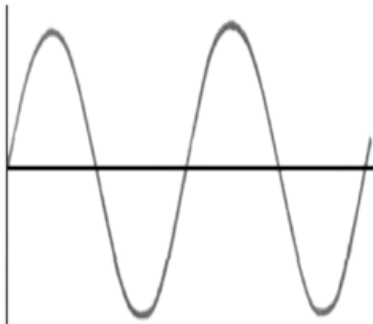
#2



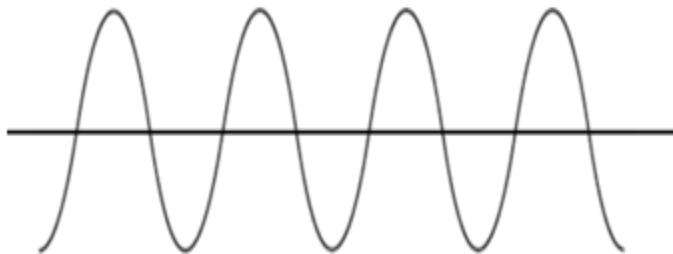
#3



#4



#5



#6



Changes In Wave Properties: Sorting Activity Group Sheets

Changes in Wave Properties: Sorting Activity Name(s) _____ Date ____ Period ____

Condition 1 Sort the wave images from smallest amplitude to highest amplitude: _____

Condition 2 Sort the wave images from shortest wavelength to longest wavelength: _____

Condition 3 Sort the wave images from lowest frequency to highest frequency: _____

4. Which of the following waves is more than likely transferring the greatest amount of energy? 2 or 6 Explain your answer. _____

5. Which of the following waves is more than likely transferring the greatest amount of energy? 4 or 3 Explain your answer. _____

6. Compare your answers for Conditions 2 and 3. What do you notice? _____

Changes in Wave Properties: Sorting Activity Name(s) _____ Date ____ Period ____

Condition 1 Sort the wave images from smallest amplitude to highest amplitude: _____

Condition 2 Sort the wave images from shortest wavelength to longest wavelength: _____

Condition 3 Sort the wave images from lowest frequency to highest frequency: _____

4. Which of the following waves is more than likely transferring the greatest amount of energy? 2 or 6 Explain your answer. _____

5. Which of the following waves is more than likely transferring the greatest amount of energy? 4 or 3 Explain your answer. _____

6. Compare your answers for Conditions 2 and 3. What do you notice? _____

Changes in Wave Properties: Sorting Activity Name(s) _____ Date ____ Period ____

Condition 1 Sort the wave images from smallest amplitude to highest amplitude: _____

Condition 2 Sort the wave images from shortest wavelength to longest wavelength: _____

Condition 3 Sort the wave images from lowest frequency to highest frequency: _____

4. Which of the following waves is more than likely transferring the greatest amount of energy? 2 or 6 Explain your answer. _____

5. Which of the following waves is more than likely transferring the greatest amount of energy? 4 or 3 Explain your answer. _____

6. Compare your answers for Conditions 2 and 3. What do you notice? _____

Changes In Wave Properties: Sorting Activity

Directions: In small groups, sort the wave images based on each condition listed below. List the order of the answers on the group worksheet. Note: Students should cut out each wave image. Once cut out, students can place the images on top of one another to compare amplitude, wavelength, and frequency.

Condition 1: Sort the wave images from smallest amplitude to highest amplitude. **Answers: 2, 6, 3, 1, 5, 4**

Condition 2: Sort the wave images from shortest wavelength to longest wavelength. **Answers: 2, 5, 4, 1, 3, 6**

Condition 3: Sort the wave images from lowest frequency to highest frequency. **Answers: 6, 3, 1, 4, 5, 2**

After completing the three conditions, groups should answer the additional questions.

4. Which of the following waves is more than likely transferring the greatest amount of energy? 2 or 6 Explain your answer. **Wave 2 is more than likely transferring the greatest amount of energy because it has a higher frequency than Wave 6.**

5. Which of the following waves is more than likely transferring the greatest amount of energy? 4 or 3 Explain your answer. **Wave 4 is more than likely transferring the greatest amount of energy because it has a higher amplitude and frequency. Higher amplitude = more energy and higher frequency = more energy.**

6. Compare your answers for Conditions 2 and 3. What do you notice? **They are the opposite of one another, which shows frequency and wavelength are inversely related.**