

**Mechanical Waves**  
**Formative Assessment**

Name \_\_\_\_\_  
Date \_\_\_\_\_ Block \_\_\_\_\_

**Answer completely in the space provided. You may do any work on the back.**

1. Sharee swings a pendulum back & forth 20 times in 40 seconds. What is the period of the pendulum?...Frequency?
2. What adjustment needs to be made to a clock's pendulum if the clock is running slow?
3. In which type of wave does the energy move perpendicular to the vibration of the medium?
4. **True or False:** The medium moves along with a wave.
5. The \_\_\_\_\_ of a wave is the maximum displacement of the medium from the rest position.
6. A water wave has a frequency of 0.5 Hz and a wavelength of 2 m. How fast does it travel through the water?
7. What is the wavelength of a 50 Hz wave traveling at 500 m/s?
8. The medium located at the \_\_\_\_\_ of a standing wave is not disturbed by the wave.
9. A spring is used to produce a 15 Hz standing wave with five anti-nodes. What is the frequency of a one anti-node standing wave in the same spring?
10. The natural frequency of a long stick is \_\_\_\_\_ than the natural frequency of a short stick.
11. When a one foot crest and a one foot trough of two water waves meet, \_\_\_\_\_ interference will cause the water to be undisturbed at that moment.
12. Sketch a transverse wave. Label a crest, the amplitude, and the wavelength.

---

Circle the questions you answered incorrectly. Remove this strip and turn in to your teacher.

C11

Pendulum

Wave

K-U-E-S

Standing

1  
2

3  
4  
5  
12

6  
7

8  
9  
10  
11

**Name:**

**Mechanical Waves**  
**Formative Assessment**

Name \_\_\_\_\_  
Date \_\_\_\_\_ Block \_\_\_\_\_

**Answer completely in the space provided. You may do any work on the back.**

1. Sharee swings a pendulum back & forth 20 times in 40 seconds. What is the period of the pendulum?...Frequency?
2. What adjustment needs to be made to a clock's pendulum if the clock is running slow?
3. In which type of wave does the energy move perpendicular to the vibration of the medium?
4. **True or False:** The medium moves along with a wave.
5. The \_\_\_\_\_ of a wave is the maximum displacement of the medium from the rest position.
6. A water wave has a frequency of 0.5 Hz and a wavelength of 2 m. How fast does it travel through the water?
7. What is the wavelength of a 50 Hz wave traveling at 500 m/s?
8. The medium located at the \_\_\_\_\_ of a standing wave is not disturbed by the wave.
9. A spring is used to produce a 15 Hz standing wave with five anti-nodes. What is the frequency of a one anti-node standing wave in the same spring?
10. The natural frequency of a long stick is \_\_\_\_\_ than the natural frequency of a short stick.
11. When a one foot crest and a one foot trough of two water waves meet, \_\_\_\_\_ interference will cause the water to be undisturbed at that moment.
12. Sketch a transverse wave. Label a crest, the amplitude, and the wavelength.

---

Circle the questions you answered incorrectly. Remove this strip and turn in to your teacher.

C11

Pendulum

Wave

K-U-E-S

Standing

1  
2

3  
4  
5  
12

6  
7

8  
9  
10  
11

**Name:**