Waves: Day 4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_ Date: Friday, March 24th

Quiz today! Please use the GradeCam sheet given out by the substitute. You can circle your answers on here as well if you would like to so that you can check your answers later.

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| 1. What are the two main types of waves?A) Mechanical & EM B) Transverse & LongitudinalC) Sound & Light D) Radio & Sound2. Sound is an example of which type of wave?A) Electromagnetic B) TransverseC) Longitudinal D) Visible Light3. T/F: Both transverse and longitudinal waves need a medium to travel. A) True B) False4. T/F: S Waves are longitudinal. A) True B) False | 5. The matter in a transverse wave travels:A) In a circle B) Back and forthC) Up and Down D) It does not travel.6. This is what we call the matter a wave travels through:A) Solid B) Gas C) Liquid D) Medium7. “Sea Level” is also known as:A) Line of Origin B) the Alpha C) the medium D) the axisDiffraction | 8) The matter in a longitudinal wave travels:A) In a circle B) Back and forthC) Up and Down D) It does not travel.9) The volume of a wave is determined by:A) The wave height (amplitude) B) the mediumC) The wavelength D) The wave cycle10. The pitch of a wave is determined by:A) The wave height (amplitude) B) the mediumC) The wavelength D) The wave cycle |

Vocabulary: Draw it! Try not to use words – only labels if necessary!

Interference

Refraction

Reflection

Notes:

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| * When a wave in the water of a swimming pool hits the end, it bounces back. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	+ When the water meets the wall of the pool, it pushes against the wall. The wall applies an \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_ force on the water, sending the wave in the other direction.
	+ When sound waves reflect off of a wall, like in a canyon, it produces an \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Sometimes when a wave encounters a new medium, it doesn’t bounce back. Instead, it bends, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Refraction occurs because waves travel at different speeds in different \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	+ This happens because one end of the wave enters the new \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ before the rest of the wave. When one side speeds up or slows down because of the new medium, it causes the wave to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
 | * Sometimes, waves interact with a partial \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	+ As the waves pass through the opening, they spread out, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
	+ Diffraction is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ of waves through an opening or around the edge of an obstacle.
	+ Diffraction occurs with \_\_\_\_\_\_\_\_\_ types of waves.
* Two waves can \_\_\_\_\_\_\_\_\_ energy or take away \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from each other in the place where they meet.
	+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the meeting and combining of waves.
	+ When waves line up (crest to crest and trough to trough) to create a larger wave, we call it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interference.
	+ When waves don’t line up (crest to trough) to create a smaller wave or cancel out completely, it is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interference.
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Survey Time! You do NOT have to put your name, but it would be helpful if you do so I can ask you clarifying questions. ☺

Scale from 1-10: 1 = I do NOT agree with this statement, 5 = I’m indifferent/undecided, 10 = I COMPLETELY agree with this statement.

1. I really like being able to choose my own seat: \_\_\_\_\_\_
2. I feel like I am responsible enough to make a good decision about where to sit: \_\_\_\_\_\_\_
3. I like the new style of bell work: \_\_\_\_\_\_
4. I like being able to check my understanding each day with Gradecam: \_\_\_\_\_\_\_
5. I think the new style of bell work will help me stay organized: \_\_\_\_\_\_
6. I struggle with finding a good place to sit because I want to sit with friends: \_\_\_\_\_\_\_
7. I do not like the new style of bell work: \_\_\_\_\_\_\_
8. I like the new way we do notes: \_\_\_\_\_\_\_
9. I feel like the smaller amount of notes helps me stay focused: \_\_\_\_\_\_\_
10. I like being able to choose the activities that I do each day: \_\_\_\_\_\_
11. I do not like having a “learning check” each day: \_\_\_\_\_\_
12. Having to choose which activity to complete is difficult for me: \_\_\_\_\_\_\_