Name: _____ #: _____ Date: _____

Surf's Up Unit Review

Define the following words:

wave _____

bit _____

transparent _____

translucent _____

opaque _____

reflection _____

refraction _____

absorption _____

Give me examples of the following:

reflection _____

refraction _____

heat absorption _____

light absorption _____

Label the wave with these words:
trough crest wavelength

Draw examples of the following waves.

Low pitch wave

High pitch wave

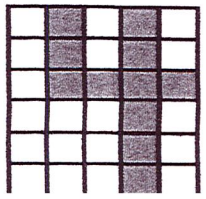
Soft sound wave

Loud sound wave

** Know how to crack codes using morse code **

** Know how to use binary codes **

Now it's your turn to crack the code. Write the code.



Line 1: _____
Line 2: _____
Line 3: _____
Line 4: _____
Line 5: _____
Line 6: _____

4-PS- Sound and Light Waves

Target I can develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves cause objects to move. (PS4-1)

Definition	Word	Draw it!
The time it takes for the crest of a wave to pass and the next one to start		
The maximum height of a wave crest or depth of a trough		
The distance between two crests		

Questions

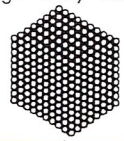
1. **What is frequency?**

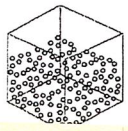
2. **What is the difference between amplitude and wavelength?**

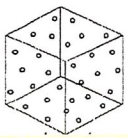
Sound Waves

Definition	Word	Example
	Sound waves	
	Pitch	
	Frequency	

Sound travels differently through different types of matter. Matter is made of tiny particles called atoms, which are so small that you cannot see them. Atoms join together to make molecules.. Molecules are always moving. They move differently in solids, liquids, and gases.







IDENTIFY & EXPLAIN