

**WAVE  
PATTERNS  
WORKSHEET**

**NAME  
DATE  
PERIOD**

**ANSWER IN COMPLETE SENTENCES --**

1. What is a wave?
2. Draw a diagram (use edit pen) of a wave and label crest, trough, amplitude, and wavelength.
3. What is an example of a wave that you experience in everyday life? Explain your example. What makes it a wave?
4. Use the tuning fork, then answer the following questions: **1) Strike a tuning fork with the mallet and place one of its tines against a 150 ml beaker with 100 ml of water in it. 2) What sounds do you hear (fill in data table)?**
  - 3) **Strike a tuning fork with the mallet and place the tips of the tines into the water about 1 cm. What happens to the water?**

**Clean up & put everything away.**

**Record your observations in table below:**

Object (key -- letter on tuning fork)	<u>Volume</u> : Was the sound loud or soft?	<u>Pitch</u> : Was the sound high or low?	<u>Frequency</u> : Did the water vibrate fast or slow?
Tuning fork --			

**Fill in the blanks:**

WORD BANK:

**MOLECULES  
VIBRATIONS**

**TRANSFERRED  
WATER**

**SOUND  
WAVES**

5. When the tuning fork is struck with the mallet, \_\_\_\_\_ are produced. These cause the \_\_\_\_\_

of air to move. The waves of moving air molecules strike our eardrums and we hear \_\_\_\_\_.

As the tines of the tuning fork come into contact with the glass of the beaker, the vibrations are \_\_\_\_\_ from the fork to the beaker glass and into the \_\_\_\_\_.

These vibration \_\_\_\_\_ causes the water to move.