

# Wave applications

Name: \_\_\_\_\_ hr \_\_\_\_\_

## Part A. Seismic waves and Seismographs

1. Perform the “seismic wave” demonstration on your forearm, and topple your eraser “building” caused by your finger snap “earthquake.” Explain why buildings fall after an earthquake using the words **vibration/vibrate**, **motion energy**, **seismic wave**, and **transfer** (4PTS)

Watch the video to understand how a seismograph works:

[http://www.youtube.com/watch?feature=player\\_detailpage&v=Gbd1FcuLJLQ](http://www.youtube.com/watch?feature=player_detailpage&v=Gbd1FcuLJLQ)

2. Explain to your partner how a seismograph works. Write down what you said below. If you like what your partner said to you better, write down their words below.

Part B. Echolocation- [http://www.youtube.com/watch?feature=player\\_detailpage&v=5mwoOyOleGc](http://www.youtube.com/watch?feature=player_detailpage&v=5mwoOyOleGc)

3. Draw a bat using echolocation to find a moth.



4. Explain in your own words how echolocation works for dolphins.

[http://www.youtube.com/watch?feature=player\\_detailpage&v=BYiCzWZ8cBs](http://www.youtube.com/watch?feature=player_detailpage&v=BYiCzWZ8cBs)