#  **Reading Seismograms: Part 1**

### **Section 1 - Introduction**



**Unlocki1ng2 the secre3t4s of a seismogram5…**

\_ \_ s \_or\_ \_han jus\_ w\_ggl\_s

1 4 5 3 4 4 1 3

 **Solve the puzzle and write the mystery message below?**

### **Section 2 - What do you already know about seismograms?**

**Watch the following** [**video**](https://www.iris.edu/hq/inclass/animation/seismograms_of_common_events_compiled) **and answer the questions below.**

(<https://www.iris.edu/hq/inclass/animation/seismograms_of_common_events_compiled>**)**



**What do you think a seismogram is?**

**What information do you think it conveys?**

**What makes you think so?**

### **Selection 3 - Let's Explore Further**

As you probably discovered in the previous video, seismograms show how and to what degree the ground moves with the passage of time. However, how were those seismograms created? To get a better sense of that, let’s explore.

**Watch this** [**video**](https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_15) **and follow the instructions to do the following**

**(**[**https://www.iris.edu/hq/inclass/video/build\_your\_own\_seismograph\_tutorial\_\_part\_15**](https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_15)**)**

1. **On a separate piece of paper, design a seismometer to record ground motion (pay attention to the elements of an *“excellent”* design shown in the video).**
2. **Build, test, and revise your design.**
3. **Make a list of the things you used in your design and explain the role of each component. These animations might offer some helpful hints for your design..**
	1. [**https://www.iris.edu/hq/inclass/animation/seismograph\_vertical**](https://www.iris.edu/hq/inclass/animation/seismograph_vertical)
	2. [**https://www.iris.edu/hq/inclass/animation/seismograph\_horizontal**](https://www.iris.edu/hq/inclass/animation/seismograph_horizontal)
4. **Paste a photo of your design along with your list of components into the space below. Make sure you include your explanations for what each component does.**

**Now that you have created your own design, watch this** [**video to explore the key components of a seismometer**](https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_25) **similar to the one you probably built.**

**(**[**https://www.iris.edu/hq/inclass/video/build\_your\_own\_seismograph\_tutorial\_\_part\_25**](https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_25)**)**

**In the space below, compare and contrast your seismometer to the one shown in the video.**

If you want to learn even more, this [video explores the components of real seismometers used by scientists!](https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_45)

(<https://www.iris.edu/hq/inclass/video/build_your_own_seismograph_tutorial__part_45>)

### **Section 4 - Summarize your learning so far!**

**With each word worth 10 cents, write a $3.50 summary of the learning from the lesson. You must use the following five words (or 50 cents) in your response… mass, spring movement, seismometer, seismogram.**