

Overview:

After completing lessons related to tsunami triggers, students sort sources of waves into potential tsunami triggers and non-tsunami sources.

Targeted Alaska Grade Level Expectations:

Science

[3-4] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.

[4] SD2.2 The student demonstrates an understanding of the forces that shape Earth by identifying causes (i.e., earthquakes, tsunamis, volcanoes, landslides, and avalanches) of rapid changes on the surface.

Objectives:

The student will classify sources of waves, or triggers, into two categories: tsunami and non-tsunami wave generators.

Materials:

- Scissors
- Glue sticks
- STUDENT INFORMATION SHEET: "Trigger Sort Cards"
- STUDENT WORKSHEET: "Trigger Sort"

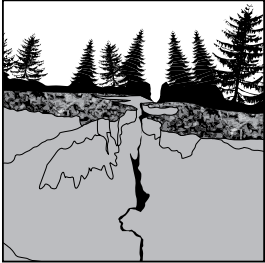

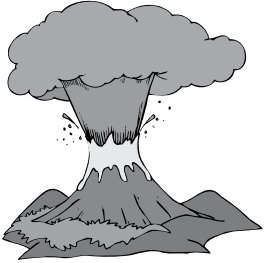
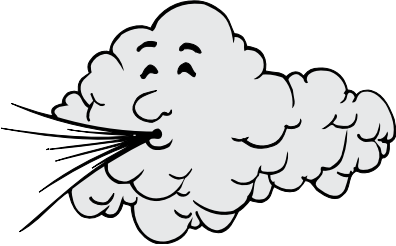
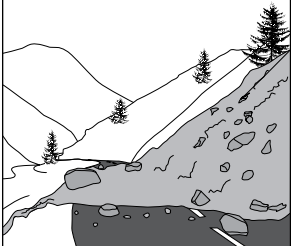

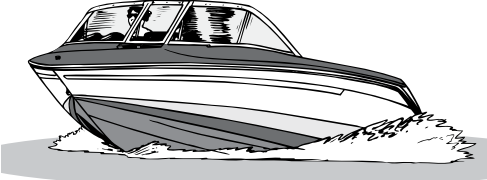

Science Basics:

A tsunami may be triggered by any source that is powerful enough to displace a large mass of water from its equilibrium, or resting, position.

Activity Procedure:

1. Explain that students have previously completed lessons that pertain to the most common triggers of tsunamis. In this lesson, students will review what they have learned and sort sources of waves into categories.
2. Distribute scissors, glue sticks, and STUDENT INFORMATION SHEET: "Trigger Sort Cards" and STUDENT WORKSHEET: "Trigger Sort," and instruct students to cut the sort cards apart then glue them into the appropriate category on the student worksheet.
3. After students have completed the worksheet, discuss. Possible questions may include:
 - a. Why is the one category titled: "*Might start a tsunami?*"
 - b. Can you think of another wave generator besides the ones already listed? Which category would it fall under?
 - c. Do you remember which is the most common tsunami trigger? (*earthquake*)

Answers:

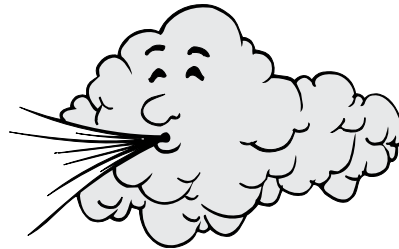
These <i>might</i> start a tsunami	These <i>will not</i> start a tsunami
 <p data-bbox="540 457 691 489">earthquake</p>	 <p data-bbox="1105 457 1182 489">storm</p>
 <p data-bbox="540 739 643 770">volcano</p>	 <p data-bbox="1239 722 1304 753">wind</p>
 <p data-bbox="570 1008 688 1039">landslide</p>	 <p data-bbox="1133 1008 1284 1039">a whale tail</p>
	 <p data-bbox="1328 1239 1468 1270">boat wake</p>
	 <p data-bbox="1179 1516 1370 1547">moon and tide</p>

Student Information Sheet

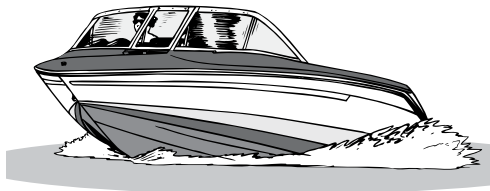
Trigger Sort Cards



storm



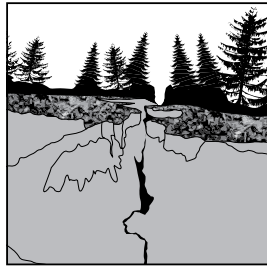
wind



a boat wake



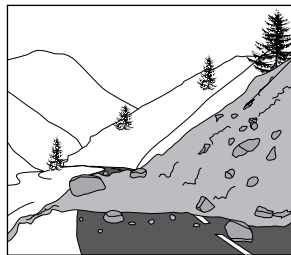
a whale tail



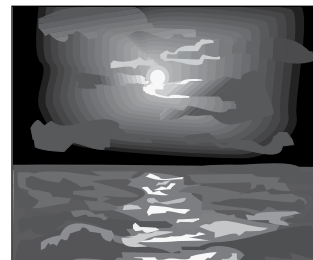
earthquake



volcano



landslide



moon and tide

Name: _____



Student Worksheet

Trigger Sort

Directions: Cut out and glue "Trigger Sort Cards" into the best category below.

<p>These <u>might</u> start a tsunami</p>	<p>These <u>will not</u> start a tsunami</p>
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