

8



Learning Activity Sheet for Science

Quarter 3

Lesson

3

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Learning Activity Sheet for Science Grade 8
Quarter 3: Lesson 3 of 8 (Week 3)
SY 2025-2026

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LEARNING ACTIVITY SHEET

Learning Area:	Science 8	Quarter:	3 rd Quarter
Lesson No.:	Lesson 3 Subtopic 1	Date:	
Lesson Title/ Topic:	Types of Eruption		
Name:		Grade & Section:	

I. Activity No.: Activity #1: Fact or Bluff

II. Objective(s): At the end of the activity, the learners have identified which statements related to volcanoes are true or not.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.)

IV. Instructions: Verify your ideas about volcanoes using the STATEMENTS below. Under the EXPECTATION column, write Fact if you think the statement is a true or Bluff if false.

Expectation	Statements	Response
	All volcanoes erupt violently.	
	Volcanoes are made only of lava.	
	All volcanoes are cone shaped with steep sides.	
	The largest volcanoes are found on land.	
	Lava flows are the most dangerous volcanic hazard.	
	All volcanoes have the same dangers.	
	It is never possible to evacuate people from a volcano.	
	Volcanic eruptions only affect local areas.	
	Volcanoes are described according to their shape and type of eruption.	
	There are no volcanoes in the ocean.	

LEARNING ACTIVITY SHEET

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I. Activity No.: Activity #2: Word Chop

II. Objective(s): At the end of the activity, the learners unlock the content area vocabulary.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.)

IV. Instructions: The table below contains words that have been chopped in its syllables. Find the pieces that fit together and match its description. You may reuse each syllable many times.

erup	tic	visco	tive	Inac
sity	va	mag	Basal	Phrea
la	Rhyoli	tion	ac	canoes
lian	nian	Strombo	ma	to
Pli	ash	Pyro	Vulca	Andesi
fall	flow	Mud	Vol	clas

- _____ is a molten rock which is given off onto the surface of the Earth when a volcano erupts.
- _____ is the molten material deep inside the Earth
- _____ is the release of gas, ash, molten materials, or hot water into the atmosphere or onto the Earth's surface from a volcano or other opening in the Earth's surface.
- _____ _____ are those volcanoes that have had at least one eruption during the past 10,000 years.
- _____ _____ are those that have not erupted for the last 10,000 years and is not expected to erupt again in a comparable time scale of the future.
- _____ is a measure of a material's resistance to flow.
- _____ _____ is a type of magma that contains a lot of iron and magnesium, but little silica. It is fluid and flows freely.
- _____ _____ is another type of magma that contains more silica than basaltic magma.
- _____ _____ has the highest gas content and highest silica content and the most viscous magma composition.

Volcanoes are classified according to their manner of eruption such as:

10. One of the types of volcanic eruptions is _____ also known as hydrothermal. It is a steam-driven eruption as the hot rocks meet water. It is short lived, characterized by ash columns but may be a beginning of a larger eruption
11. _____ is a violent eruption due to the contact between water and magma. As a result, a large column of very fine ash and high-speed and sideways emission of pyroclastic materials called base surges are observed.
12. _____ is a periodic, weak to violent eruption characterized by fountain lava, just like the Irazu Volcano in Costa Rica.
13. _____ is characterized by tall eruption columns that reach up to 20 km high with pyroclastic flow and ash fall tephra like that of Paricutin Volcano in Mexico.
14. _____ is excessively explosive type of eruption of gas and pyroclastic materials, like in Pinatubo Volcano in Zambales.

Volcanic hazards are phenomena arising from volcanic activity that poses potential threat to people and property. Some of these are:

15. _____ - pulverized rocks, sand, gritty and harsh glasses shoot out in the air by volcano.
16. _____ - mixture of water, molten rocks and debris flowing down from the side of volcano to the ground. It is also called as Lahar.
17. _____ - streams of molten rocks and other fragmented materials emitted by erupting volcano.
18. _____ - fast moving hot mixtures of gas, ash, and molten rocks moving away from the volcano to the ground.

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I. Activity No.: Activity #3: Spot those Volcanoes

II. Objective(s): At the end of the activity, the learners locate volcanoes on a Philippine map using latitude and longitude.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.), Philippine map

IV. Instructions:

1. Identify where in the Philippines does the following volcano can be located.

Volcano	Latitude	Longitude	No. of Historical eruptions	Latest eruption or activity
Cabaluyan	15°42'	120°19'	0	-
Cocoro	10°53'	121°12'	0	-
Iraya	20°29'	122°01'	1	1454
Kanlaon	10°22'	123°7'	42	2017, Dec 20
Mayon	13°15'	123°41'	54	2024, Feb 04
Pulung	7° 55'	124°38'	0	-
Smith	19°32'	121°55'	5	1924
Taal	14°	120°59'	35	2022 Mar 27
Tamburolo	11°33'	124°26'	0	-
Urot	5°59'	121°15'	0	-

Source: Philippine Institute of Volcanology and Seismology 2024

2. Plot the location of the following volcanoes found in the table.
3. Using coloring materials, draw a triangle on the location of these volcanoes.
4. Assign colors for the volcanoes, indicated in the following legend:
 - O (green)- Volcano that has no record of eruption
 - O (yellow)- Volcano that has erupted 1 to 5 times
 - O (orange)- Volcano that has erupted 6 to 10 times
 - O (red)- Volcano that has erupted more than 10 times

Guide Questions:

1. Are all the volcanoes found in the same location?
2. Which of the volcanoes had the greatest number of eruptions? least number of eruptions? no record of eruption?
3. How will you classify the volcanoes that have records of eruptions?
4. How will you classify volcanoes with no record of eruption?
5. In your own words, differentiate an active volcano from an inactive one.

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I. Activity No.: Activity #4: Shapes of Volcanoes

II. Objective(s): At the end of the activity, the learners locate volcanoes on a Philippine map using latitude and longitude.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.), Philippine map

IV. Instructions: Analyze each item. Write Cinder, Composite or Shield on the space provided before the number.

- _____ 1. Hawaiian Islands are an example of this type of volcano.
- _____ 2. Violent explosive eruptions.
- _____ 3. Smallest and most common type of volcano.
- _____ 4. Often found on or near a larger volcano.
- _____ 5. Do not often erupt violently.
- _____ 6. Usually with a gentle lava flow.
- _____ 7. Erupts ash, steam gasses, pyroclastic flows and tephra very little lava.
- _____ 8. Mount St. Helens is an example of this.
- _____ 9. Violent eruption with fiery displays of erupting lava
- _____ 10. Smith Volcano is an example of what type of volcano?

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I. Activity No.: Activity #5: Crossword Puzzle

II. Objective(s): At the end of the activity, the learners are familiarized with terms related in the formation of magma.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.)

IV. Instructions: Look for the following words that are related in the formation of magma. Encircle or use a line when found.

J	P	I	V	G	N	I	T	L	E	M	Z	W	S	E
O	G	L	E	W	K	D	O	P	Q	V	H	N	X	A
L	C	W	Q	N	E	R	U	S	S	E	R	P	K	P
B	K	I	H	U	B	W	B	J	M	G	F	M	Z	H
L	P	E	T	A	K	V	T	Z	C	V	Z	J	X	F
U	T	L	R	L	G	Q	B	U	A	I	S	B	K	H
B	E	R	N	U	A	X	T	P	G	W	K	H	S	G
X	Y	Q	H	C	T	S	S	I	L	I	C	O	N	M
V	P	U	B	Y	O	A	A	J	R	M	O	H	D	U
B	H	Q	H	X	O	X	R	B	G	F	R	I	W	H
L	E	S	Y	U	F	L	K	E	M	V	N	Q	V	R
M	X	G	L	E	Q	T	I	A	P	H	E	X	U	E
U	E	R	A	K	P	H	G	T	D	M	W	S	C	K
N	L	X	V	G	Y	M	S	V	I	N	E	R	O	D
G	B	W	A	E	A	D	T	O	H	C	J	T	C	F

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I. Activity No.: Activity #6: Viscosity Experiment

II. Objective(s): At the end of the activity, the learners can perform an experiment about how far liquids can travel.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.), 3 test tubes, 3 droppers, a stopwatch, 9 paper clips, ruler, masking tape, a wooden block, and a sheet pan.

IV. Instructions:

1. Break the students into groups of three.
2. Each group will fill their test tubes with the three liquids to the same height (marked on the test tubes). One tube should be filled with syrup. A second tube with oil. And a third tube with water.
3. Have the students use masking tape to label their tube with the appropriate liquid.
4. Do the experiment and fill out the Viscosity of Liquids: Data.
- 5.

Part 1: Paper Clip Drop

Which liquid do you think will have the highest viscosity? _____

Data:

	Trial 1	Trial 2	Trial 3	Average time
Corn Syrup				
Cooking Oil				
Water				

Part 2: Rate of Flow

Which liquid will flow the fastest? _____

Which will flow the slowest? _____

Data:

	Trial 1	Trial 2	Trial 3	Average time
Corn Syrup				
Cooking Oil				
Water				

Guide Questions:

1. Which of your liquids has the highest viscosity? _____
2. Which of your liquids has the lowest viscosity? _____
3. Look at the two volcanoes below. Do you think the magma that created them were viscous or not viscous?

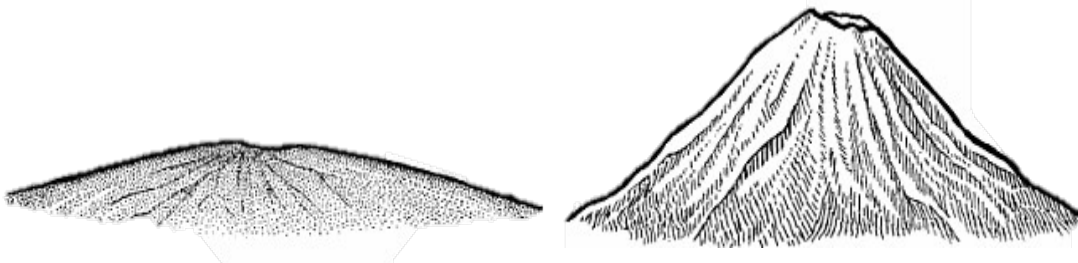


Image Source: merriam-webster.com

Type of Volcano: _____
Viscosity: _____

4. When volcanoes erupt, they can erupt either quite explosively with plumes of ash and gas or more gently with flowing rivers of magma.
 - a. Will a more or less viscous magma cause an explosive eruption?
 - b. Will a more or less viscous magma cause a gentle eruption?

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I. Activity No.: Activity #7: Volcanic Eruptions: Cause and Effect

II. Objective(s): At the end of the activity, the learners can think of effects of some materials ejected from volcanic eruption.

III. Materials Needed: worksheet, writing materials (ballpen, pencil, etc.)

IV. Instructions: List down the effects of the following materials on human and other living things.

CAUSE <i>Materials Ejected from Volcano</i>	EFFECTS <i>on human and other living things</i>
1. Lava	
2. Steam	
3. Fragmented debris (<i>Tephra</i>)	
4. Dissolved gases	
5. Volcanic Ash	