

EOT – TERM 2 – Revision

MCQ

Inspire Science

Grade – 5

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

6

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 42

Erosion and deposition

The natural bridges were formed by erosion.

Erosion is the process of weathered rock moving from one place to another. The process of eroded materials being dropped off in another place is **deposition**. Erosion and deposition work together to change the shape of the land.

- The looping curves in this river are called **meanders**.
- **Slow-moving water** deposits sediments **on the inside of a meander.**
- **Faster-moving water** erodes sediments **on the outside of meanders.**

Erosion and Deposition by Running Water

As water runs downhill, it can wash away soil and erode rock. The water, soil, and rocks will eventually flow into a larger body of water, such as a river. Rivers with fast-moving water tend to follow straight paths. Fast-moving water has more energy. It can wash away larger amounts of heavier sediment. Rivers with slow-moving water tend to follow curved paths. Slow-moving water has less energy. It carries smaller particles of sediment.



Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

6

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 42

Which of the following best defines erosion?

- a. Very cold places with thick sheets of ice
- b. A place that floods easily when river water rises
- c. The process of eroded materials being dropped off in another place
- d. The process of weathered rock moving from one place to another

Which of the following statements about erosion is **not** correct?

- a. Erosion might be caused by moving water
- b. Erosion might be caused by the movement of glaciers
- c. Erosion might be caused by the sunlight
- d. Erosion might be caused by rivers

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

6

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 42

7) Anna goes to the same beach with her family every summer. This year she noticed that the beach was smaller than last year. What might have caused the beach to change over the years?

- A volcano erupted and lava flowed over the beach.
- The cold weather caused the beach to change.
- Wind and water eroded the beach.
- Oxygen in the air reacted with the sand.

9) Fill in the blanks using the available answer choices.

The shape of different landforms is often changed by _____ water.
(Blank 1)

Blank 1 options

- flowing
- standing

Students in a science class are building models to demonstrate how Earth's systems interact.

Which model demonstrates how running water causes erosion and deposition?

- (A) Small pebbles are placed inside a bucket. Water is slowly poured into the bucket. The pebbles stay in place.
- (B) Water is poured down the side of a mound of dirt. A shallow trench forms where the water runs. Dirt from the top of the mound is carried to the bottom.
- (C) An aluminum tray is filled with sand. A fan is placed at one end of the tray. When the fan is turned on, it blows the sand from one side of the tray to the other.
- (D) A teaspoon of sand is added to a glass of water. The water is stirred until it becomes cloudy.

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

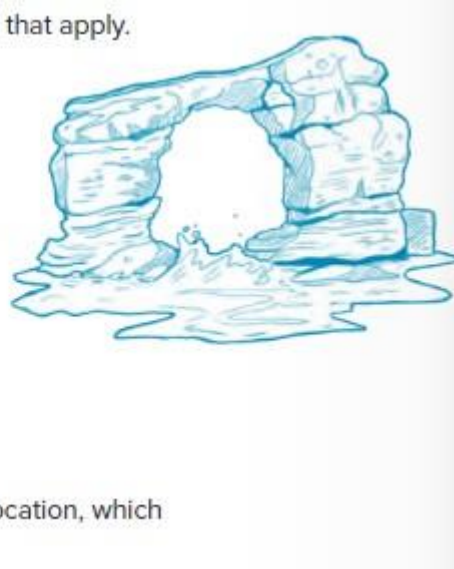
6

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 42

1. How is erosion an effect of the hydrosphere? Circle all that apply.

- Erosion can be caused by moving water.
- Erosion can be caused by precipitation.
- The movement of glaciers causes erosion.
- D. The hydrosphere contains all of the land on Earth.



2. How does erosion shape the land?

- A. Earth's surface is changed by living things.
- B. Erosion does not change the shape of the land.
- C. Erosion happens only in the winter.
- Erosion carries the sediment and rock to another location, which changes the shape of the land.

3. The looping curves in this river is called

- A delta
- B alluvial fan
- C meanders
- D floodplains



4. Which of the following is **NOT** a property of fast-moving rivers?

- A follow straight path
- B has more energy
- C carries heavier sediments
- follow curved path

Which of the following can be explained by erosion and deposition?

<input checked="" type="radio"/>	rocks from mountains moved to the beach
<input type="radio"/>	2 the change of seawater temperature over the summer
<input type="radio"/>	3 sand temperature changes at night
<input type="radio"/>	4 seawater color changes at night

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

6

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 42

Can ocean waves change the rocks along a coastline?

- | | |
|----------------------------------|--|
| <input checked="" type="radio"/> | Yes. Pounding waves break rocks into smaller pieces. |
| <input type="radio"/> | Yes. Pounding waves glue smaller rocks together. |
| <input type="radio"/> | No. Waves are too weak to change rocks. |
| <input type="radio"/> | Maybe. Scientists are not sure. |

5-What happens when erosion and deposition work together?



- A. New Mountains are formed
- B. The climate changes overtime
- C. Metal pieces become rusty
- They change the Earth's surface

Ahmed visits the beach every summer with his family. Last summer he noticed that a big rock that he always sees has become slightly smaller. Which of the following best explains why the rock became smaller?

- | | |
|----------------------------------|---|
| <input checked="" type="radio"/> | wind and water eroded the rock |
| <input type="radio"/> | nitrogen in the air reacted with the rock |
| <input type="radio"/> | foggy weather caused the rock to become smaller |
| <input type="radio"/> | sun heated the rock which caused the rock to become smaller |

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

7

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 88

Earth's atmosphere

The atmosphere is ***all the gases that surround Earth.***

Earth's atmosphere ***contains gases, which is a matter.***

The air particles in the atmosphere ***have mass and weight.***

- ✓ The temperature of the atmosphere ***can determine activity within it.***
- ✓ There are different layers in Earth's atmosphere, ***which vary in temperature.***

Weather

Weather is the condition of the atmosphere at a given place and time.

- ✓ Weather can vary depending on the time of day, season, or location.
- ✓ Weather can involve different forms of precipitation.
- ✓ When water vapor in clouds cools, it condenses and falls to the ground as rain, hail, sleet, or snow.

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

7

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 88

Which earth system is responsible for what is happening in the figure below?



a. Biosphere

b. Geosphere

c. Hydrosphere

Atmosphere

Water that falls from the atmosphere is called

precipitation

2 temperature

3 wind

4 air pressure

What is the atmosphere?

It is a layer of gas that surrounds earth.

2 It is a layer of solid that surrounds earth.

3 It is a layer of water that covers earth.

4 It is a layer of soil that covers earth.

4) The _____ includes all the gases around Earth.



hydrosphere

crust

atmosphere

cloud

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

7

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 88

5) Which statement describes how clouds form?

- Water vapor in the atmosphere freezes and then thaws at lower altitudes.
- Water vapor in the atmosphere condenses around tiny particles of dust.
- Snow from the surface of Earth hangs in the air.
- Gases such as nitrogen and helium, combust in the atmosphere.

7) Where does the water go when water evaporates from a puddle on the street?

- It goes into a nearby river or stream.
- It sinks into the street.
- It rises into the atmosphere.
- It goes into outer space.

Module 2: Earth's other System

Lesson 2.2: Effect of Atmosphere

8

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 99

City	Average Temperature in January	Average Snowfall in January
Albany, NY	-5°C (23°F)	45.7 cm (18 inches)
Tahoe City, CA	-2°C (29°F)	101.6 cm (40 inches)
Reno, NV	2°C (36°F)	15.2 cm (6 inches)

1. What can you interpret about the data in the chart?
- A. Albany, NY is cold in January with a lot of snow.
 - B. Tahoe City, CA is cold in January with little snow.
 - C. Reno, NV is cool in January with a lot of snow.

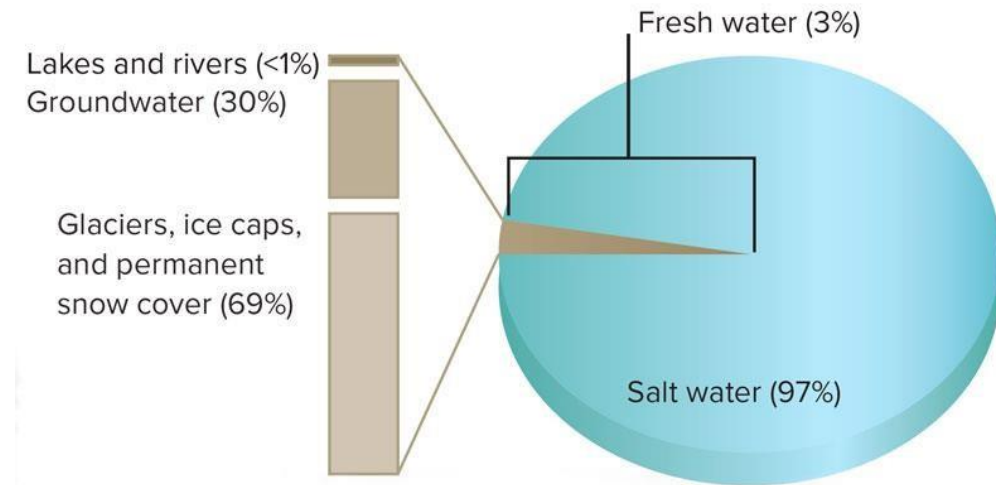
Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

9	5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.		U3M1L1 page 12
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The water found on Earth makes up the **hydrosphere**. About 97 percent of Earth's surface water is salt water found in oceans. We cannot drink salt water or use it to grow crops. For those activities, we need fresh water.

Only about 3 percent of Earth's water is fresh water. Most of this fresh water is frozen in the form of permanent snow cover, glaciers, and ice caps. A **glacier** is a thick sheet of ice. A giant **ice cap** covers Antarctica—the continent at the South Pole. This frozen water accounts for about 69 percent of Earth's fresh water. Another 30 percent is groundwater. **Groundwater** is water stored in the cracks and spaces between particles of soil and underground rocks. Less than 1 percent is running water, such as rivers, and standing water, such as lakes. A tiny bit of Earth's water is found in the atmosphere as water vapor.



Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

Less than 1 percent of Earth's freshwater is readily available for human and animal use. Where is the majority of the remaining freshwater?

In ice caps and glaciers

b. In the atmosphere

c. In the oceans

d. In lakes and rivers

What can you infer about the percentage of ground ice and permafrost if the table below shows all sources of fresh water (100%)?

Source	Percentage (%)
Ground Ice and Permafrost	?
Lakes and Rivers	21.4
Groundwater	3.8
Other	5.8

Fresh water source percentages

a. The percentage of ground ice and permafrost is the same as groundwater

The percentage of ground ice and permafrost is greater than any other source

c. The percentage of ground ice and permafrost is less than any other source

d. The percentage of ground ice and permafrost is the same as lakes and rivers

Module 1: Earth's Water System

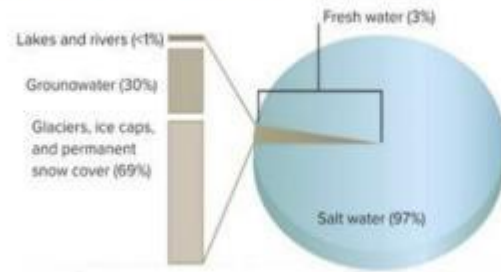
Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

Based on the pie graph below, what can you infer about water on Earth?



a.

Freshwater is abundant on Earth, while saltwater is limited

Saltwater is abundant on Earth, while freshwater is limited

c.

There is an equal amount of saltwater and freshwater on Earth

d.

Freshwater is located mostly in lakes and rivers

In the image below, all of earth's liquid and solid water make up the



a.

Biosphere

b.

Geosphere

c.

Atmosphere

Hydrosphere

Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

Which of the following water resources contains the largest amount of fresh water on earth?

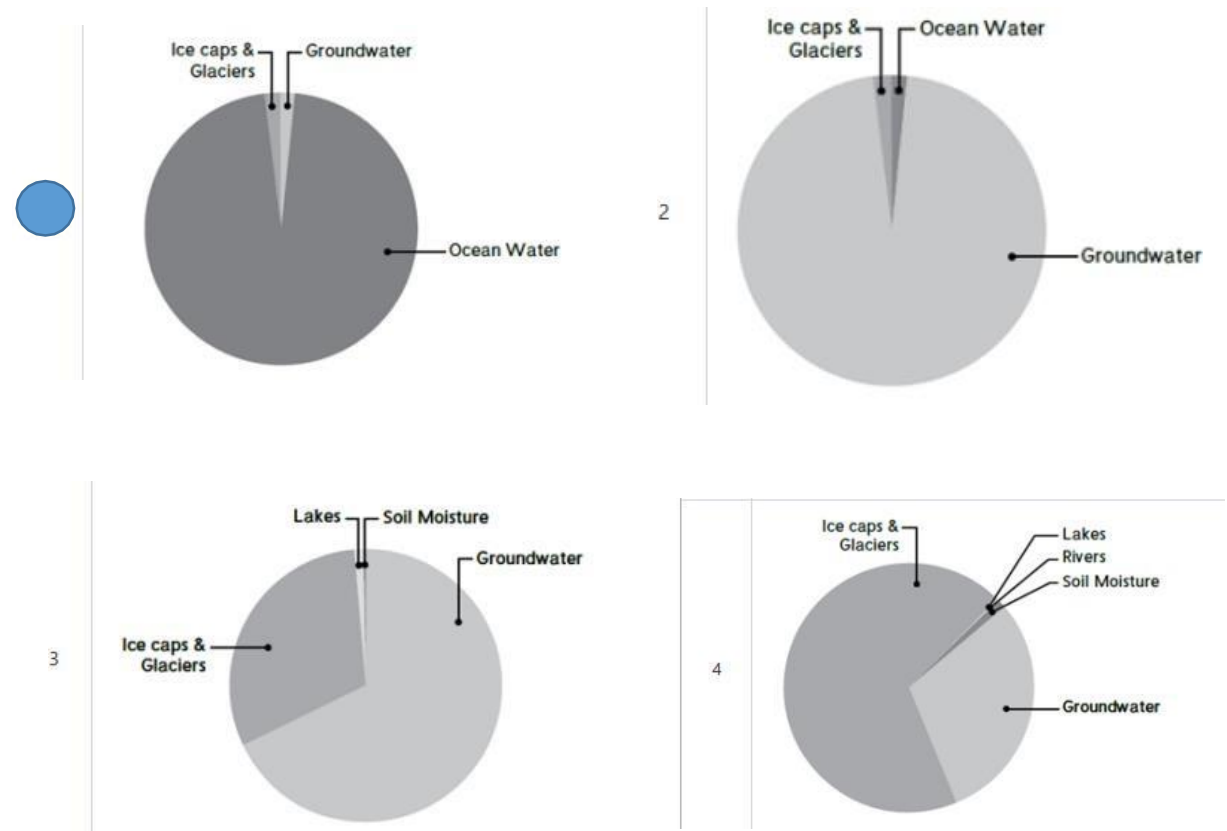
1 rivers

2 oceans

3 streams

ice caps

Reem has four graphs showing water distribution on Earth. Which of Reem's graphs below best represents water distribution on Earth?



Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

2) Less than 1 percent of Earth's freshwater is readily available for human and animal use. Where is the majority of the remaining freshwater located?

- in ice caps and glaciers
- in the atmosphere
- in the oceans
- in lakes and rivers

3) Fill in the blanks using the available answer choices.

Lakes and rivers are part of the _____ .
(Blank 1)

Blank 1 options

- hydrosphere
- geosphere

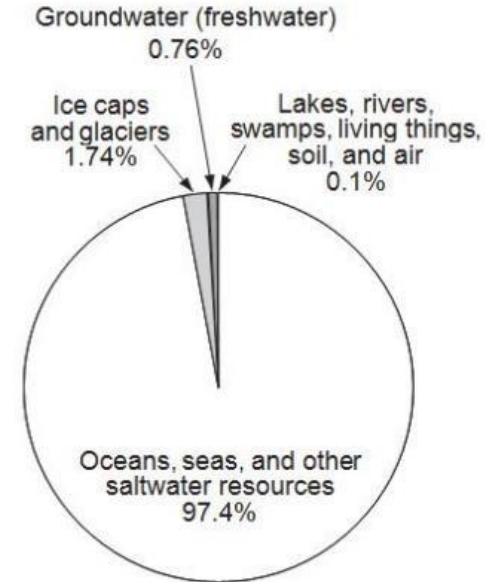
6) Fill in the blanks using the available answer choices.

Around 97 percent of the water on Earth's surface is _____ water.
(Blank 1)

Blank 1 options

- salt
- fresh

4) **Distribution of Water on Earth**



Based on the graph above, what can you conclude about the water on Earth?

- 97.4 percent of the water on Earth is saltwater
- 10 percent of the water on Earth is freshwater
- 55 percent of the water on Earth is saltwater
- 97.4 percent of the water on Earth is freshwater

Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

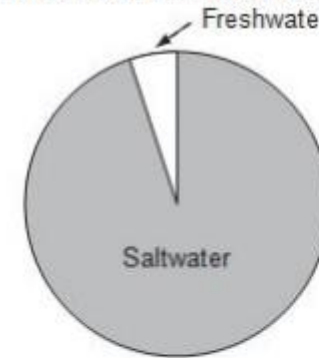
5) Freshwater Source Percentages

Source	Percentage (%)
Ground Ice and Permafrost	?
Lakes and Rivers	21.4
Groundwater	3.8
Other	5.8

Based on the table, what can you conclude about the percentage of ground ice and permafrost?

- The percentage of ground ice and permafrost is the same as groundwater.
- The percentage of ground ice and permafrost is greater than any other source.
- The percentage of ground ice and permafrost is less than any other source.
- The percentage of ground ice and permafrost is the same as lakes and rivers.

7) What can you infer about water on Earth based on the pie graph?



- Freshwater is abundant on Earth, while saltwater is limited.
- Saltwater is abundant on Earth, while freshwater is limited.
- There is an equal amount of saltwater and freshwater on Earth.
- Freshwater is located mostly in ice caps and glaciers.

8) A reservoir is an artificial lake that is built to _____ water for a later time.

Correct Answer

store

Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

10

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

9) Identify the statement that best describes where Earth's freshwater can be found.

- Most of the freshwater is trapped in glaciers and ice caps.
- Earth's freshwater is spread out equally over ice, groundwater, and surface water.
- Most of the freshwater on Earth is found underground. The rest is stored as surface water.
- Earth's freshwater is found mostly in rivers and streams. Very little is found in glaciers or ice caps.

Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

11

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 92

Climate

Weather changes every day. However, the weather in any area tends to follow a pattern.

Climate is the average weather pattern of a region over time. Climate varies from place to place. Important variables in determining climate are average temperature and average rainfall.

Climate is related to latitude, which is a location's distance north or south of the equator. Because of Earth's shape, areas closer to the equator receive more intense energy from the Sun than areas farther from the equator.

Climate is also related to how the hydrosphere and atmosphere interact. The distance a location is from a large body of water affects its temperature and average rainfall throughout the year. The geosphere also affects climate. Areas with mountains at higher altitudes have cooler climates.

Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

11

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 92

Which of the following best defines climate?

a. Rainstorms that include lightning and thunder

b. Large region of air that has a similar temperature and humidity

c. A condition of the atmosphere at a given place and time

The average weather pattern of a region over time

8) Fill in the blanks using the available answer choices.

Areas with higher elevations, such as mountain ranges, have _____ temperatures.
(Blank 1)

Blank 1 options

- higher
- lower

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

12

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 45

Floods

Water runs over the ground in streams and rivers. Sometimes, water enters a river faster than the river can carry it away. When water collects on land that is normally dry, it is called a flood. Floods occur when a body of water overflows banks or beaches. A flood may also occur during a heavy rainfall. Natural wetlands can soak up water and reduce the chances of a flood. Draining wetlands or cutting down plants along a riverbank may make floods more likely.

Floodwaters carry and deposit sediments over the land. A floodplain is a place that floods easily when river water rises. Floods can cause damage by carrying mud into homes and streets. However, floods can also have a positive effect on natural systems. After a flood, new soil deposits on the land. The nutrients in this soil help plants grow.

Hurricanes and Storm Surges

A hurricane is a very large, swirling storm that forms on the surface of tropical oceans. Strong winds, walls of clouds, and pounding rains are associated with these storms. When a hurricane moves toward a coast, winds and waves can force large amounts of water onshore. This event is called a storm surge. Flooding associated with storm surges and heavy rains can be severe.

Module 1: Earth's Water System

Lesson 3: Effects of hydrosphere

12

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 45

3) Fill in the blanks using the available answer choices.

A _____ can be caused by winds and waves from a hurricane forcing water
(Blank 1)
onshore.

Blank 1 options

- floodplain
- storm surge

16) Fill in the blanks using the available answer choices.

By definition a storm surge can occur when a _____ causes large waves in
(Blank 1)
the ocean.

Blank 1 options

- hurricane
- tornado



The picture above shows a flood. How does a flood change the land?

1	Floods have no effect on the land.
2	Floods deposit sediments and enrich the soil.
3	Floods only move animals.
4	Floods only affect the nearby aquatic life.

Module 1: Earth's Water System





Lesson 3: Effects of Hydrosphere

12





3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 45

1. The process of weathered rock moving from one place to another.

- A  Hydrosphere B  Hurricane
- C  Glacier  Erosion

2. The process of eroded materials being dropped off in another place.

- A  Weathering B  storm surge
- C  Erosion  Deposition

3. A place that floods easily when river water rises.

- A  Glacier B  Weathering
-  Floodplain D  Erosion





7. When water collects on land that is normally dry.

- A  Weathering B  Glacier
-  Flood D  Erosion

8. It is a very large, swirling storms that forms on the surface of tropical ocean

- A  storm surge B  Hydrosphere
- C  Deposition  Hurricane

9. when a hurricane moves towards a coast, winds and waves can force large amount of water onshore

- A  Floodplain  storm surge
- C  Erosion D  Weathering

4. Which of the following is **NOT** a cause of flood?

- natural wetlands
 B cutting down plants along a river bank
 C draining wetlands
 D during a heavy rainfall

8) Which evidence could indicate that a flood has happened in an area?

- A new mountain has formed.
 The sky is cloudy.
 A palm tree is charred black.
 Soil and rocks are on the road and sidewalks.

Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

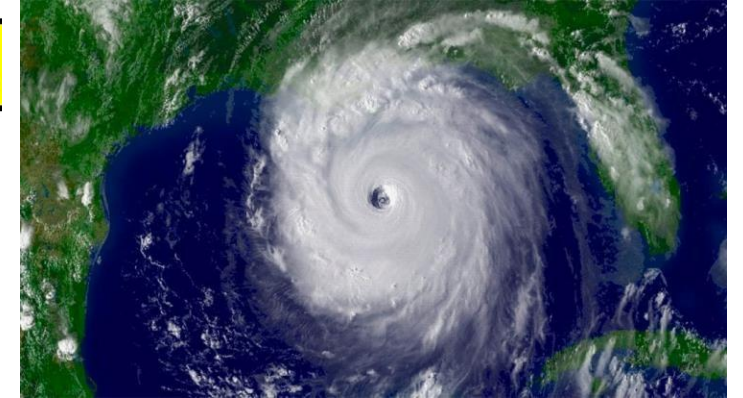
13

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 91

Tropical Storms occur near the equator where the ocean is warm. **Page 91**

A tropical storm is considered a hurricane when winds get higher than 119 kilometers per hour (74 miles per hour). Hurricanes are dangerous storms, causing coastal flooding and severe wind damage. From space, a hurricane looks like a spiral of clouds with a hole in the center, called the “eye.” The fastest winds and heaviest rains occur next to the eye.



Winter Storms occur when a cold, dry air mass meets a warm, humid air mass. Snowstorms such as blizzards happen when snow or sleet occur with high winds and cold air temperatures. Ice storms occur when rain falls and the ground temperature is cold enough that ice forms on outside surfaces. Winter storms can cause power outages, so it is important to be prepared with supplies before a winter storm occurs.



Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

13

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 91

Which type of storm is caused by a front between a warm, humid air mass and a cold dry air mass?

a.

Dust storm

b.

Tropical storm

c.

Sand storm

Winter storm

5) Fill in the blanks using the available answer choices.

_____ include strong winds, precipitation, and very cold
(Blank 1)
temperatures.

Blank 1 options

- Winter storms
 - Tornadoes

9) Which type of storm is caused by a front between a warm, humid air mass and a cold, dry air mass?

- Winter Storm
- Tropical Storm
- Thunderstorm
- Tornado

Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

13

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 91

What type of storm occurs near the equator where the ocean is warm?

- A tropical storm
- B winter storm
- C thunder storm
- D tornadoes

Where do tropical storms typically occur?

- a) Near the North Pole
- b) Near the South Pole
- c) Near the equator
- d) In the mid-latitudes

What is one of the primary dangers associated with hurricanes?

- a) Earthquakes
- b) Tornadoes
- c) Coastal flooding and severe wind damage
- d) Snowstorms

How does a hurricane appear when viewed from space?

- a) Circular pattern
- b) Square shape
- c) Spiral of clouds with an eye in the center
- d) Random cloud formation

What is the center of a hurricane called?

- a) Core
- b) Heart
- c) Eye
- d) Center

Where do the fastest winds and heaviest rains occur in a hurricane?

- a) Along the outer edges
- b) In the middle of the spiral
- c) Next to the eye
- d) Above the clouds

What atmospheric conditions typically lead to the formation of winter storms?

- a) Cold, dry air mass meeting cold, dry air mass
- b) Cold, dry air mass meeting warm, humid air mass
- c) Warm, humid air mass meeting warm, humid air mass
- d) Warm, humid air mass meeting cold, wet air mass

Module 1: Earth's Other System

Lesson 2.2: Effects of Atmosphere

13

3–5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 91

What do winter storms like blizzards include?

- a) High temperatures
- b) Low winds
- c) Snow or sleet with high winds and cold temperatures
- d) Rain and warm temperatures

Under what conditions do ice storms occur?

- a) Snowfall with low winds
- b) Rainfall with warm temperatures
- c) Rainfall with cold ground temperatures leading to ice formation
- d) Hailstorm with high winds

5) When snow or sleet occurs with high winds and cold air temperatures it is called a _____

- tropical storm
- tornado
- hurricane
- blizzard

10) Which of the following is an interaction of the hydrosphere and atmosphere?

- volcano eruption
- hurricane
- erosion
- earthquake

Module 1: Earth's Water System

Lesson 3: Effects of Hydrosphere

14

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 43

Delta

Rivers eventually flow into larger bodies of water, such as a lake or oceans. Since the water is no longer flowing downhill, it slows down. The sediment carried by the water is deposited on the bottom of the lake. Over time, this sediment builds up into a landform called a delta.



- When water that is carrying sediment enters a larger body of water, the sediment is dropped, forming a **delta**.

Alluvial fan

Rivers also deposit sediment when they flow out of a steep, narrow canyon. Here, the stream becomes wider and shallower. The water slows down as it spreads out. Sediment is deposited in a landform called an alluvial fan.



- When a rushing river runs out of a narrow canyon, it slows down and becomes shallower.
- Sediment is dropped causing an alluvial fan to form

Module 1: Earth's Water System

Lesson 3: Effects of Hydrosphere

14

3–5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 43

2- What happens when a stream slows down?

- A. The stream picks up larger particles.
- B. The stream has more energy for erosion.
- C. The stream picks up more sediment.
- D. The stream deposits sediment.

.....is formed when a river flows into a larger body of water.

- A floodplain
- B storm surge
- C delta
- D alluvial fan

.....is formed when a river runs out of a canyon.

- A floodplain
- B storm surge
- C delta
- D alluvial fan

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

15

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

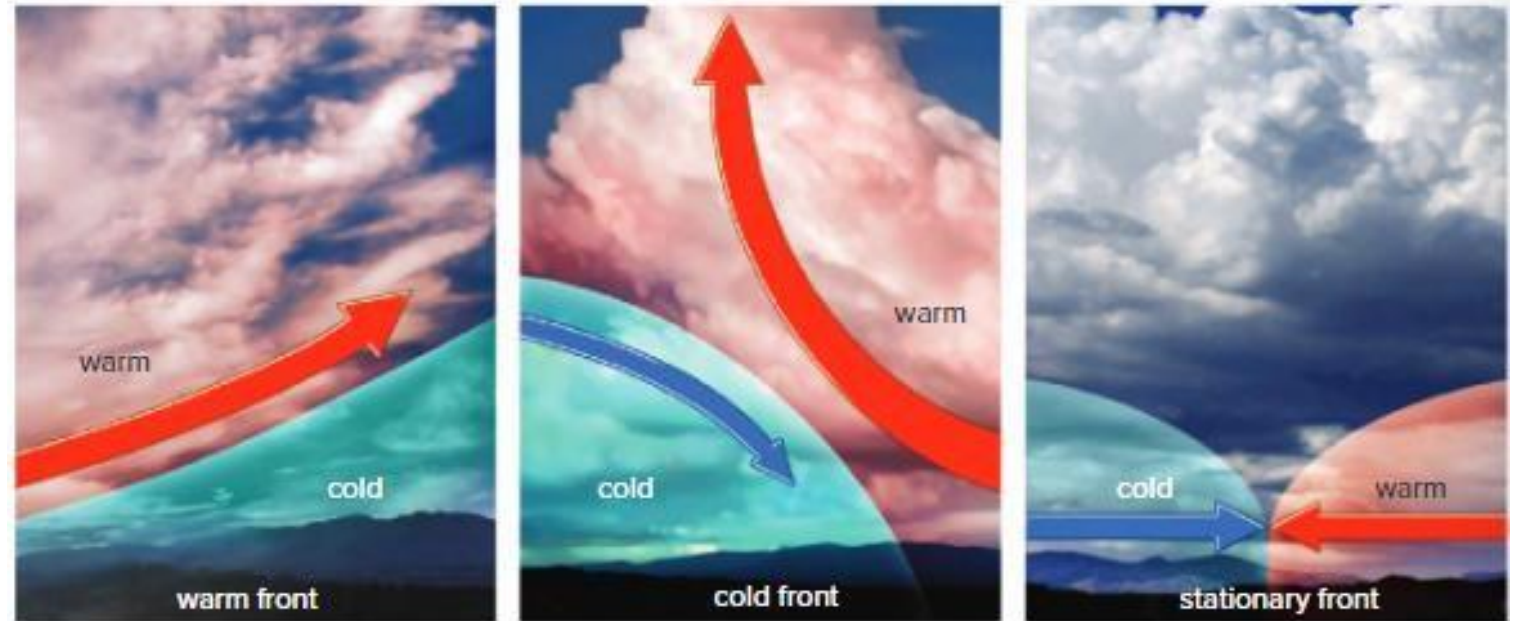
U3M2L2 page 89

Air Mass

- ✓ The air mass that is passing over an area affects the weather in that area.
- ✓ An air mass is a large region of air that has a similar temperature and humidity.
- ✓ Depending on where they form, air masses can be cool, warm, dry, or humid.

Fronts

- ✓ When one air mass meets a different air mass, the meeting place is called a front.
- ✓ A front is the boundary between two air masses that have different temperatures.



*The arrows indicate temperature as well as the direction of movement.
Red arrow indicates warm air movements.
Blue arrow indicates cold air movements.*

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

15

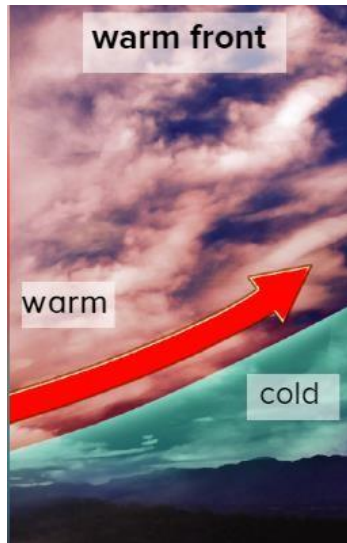
3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 89

Types of Fronts

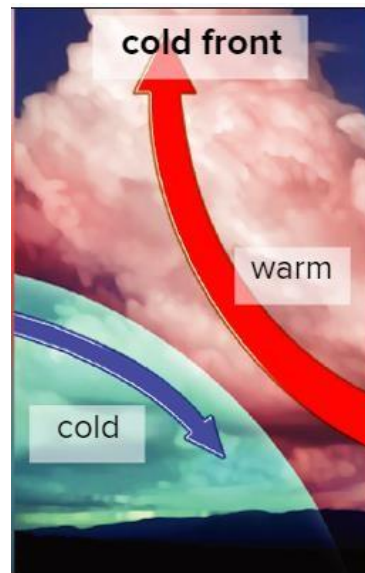
Warm Fronts

- ✓ A warm front **forms when a warm air mass pushes into a cold air mass.**
- ✓ The *warm air goes up and over the cold air mass.*
- ✓ **It often brings light, steady rain.**



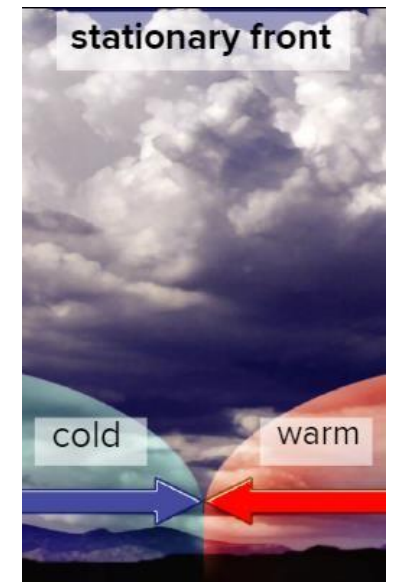
Cold Fronts

- ✓ A cold front forms **when a cold air mass pushes under a warm air mass, forcing the warm air quickly upward.**
- ✓ **It often brings stormy weather.**



Stationary Fronts

- ✓ Sometimes *rainy weather* lasts for days.
- ✓ This is caused by a stationary front, **which is a boundary between air masses that does not move.**



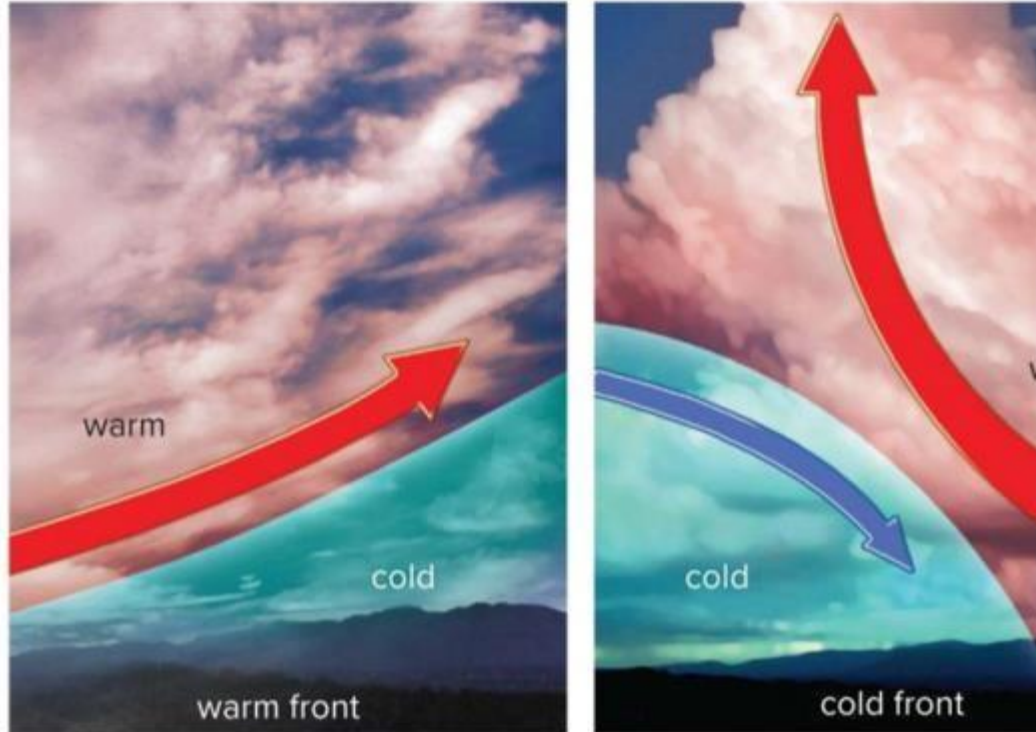
Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

15

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 89



The figure above shows air mass movement in warm and cold fronts. What do you notice about the movement of **warm air masses** on the two fronts?

1	In the cold front cold air masses rises at a steep angle, while in the warm front cold air rises at a gradual angle.
2	In the cold front warm air masses rises at a steep angle, while in the warm front warm air rises at a gradual angle.
3	In the cold front warm air masses rises at a steep angle, while in the warm front cold air rises at a gradual angle.
4	In the cold front cold air masses rises at a steep angle, while in the warm front warm air rises at a gradual angle.

Module 2: Earth's Other System

Lesson 2.2: Effects of Atmosphere

15

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 89

3) A place where two air masses meet is called a _____.

Correct Answer

front

What is a front?

- a) A meeting place for social gatherings
- b) The boundary between two air masses with the same temperatures
- c) The boundary between two air masses that have different temperatures
- d) A specific atmospheric layer

What conditions lead to the formation of a warm front?

- a) Cold air mass pushing into a warm air mass
- b) Warm air mass pushing into a cold air mass
- c) Warm air mass rising vertically
- d) Cold air mass descending rapidly

What type of precipitation is often associated with warm fronts?

- a) Heavy snow
- b) Thunderstorms
- c) Light, steady rain
- d) Hailstorms

What type of weather is often associated with cold fronts?

- a) Clear skies and mild temperatures
- b) Light, steady rain
- c) Stormy weather
- d) Prolonged sunny day

What is a stationary front?

- a) A front that moves rapidly
- b) A boundary between air masses that does not move
- c) A front with no temperature difference
- d) A front that forms only in winter

What type of front is formed in this image?

- a) Cold front
- b) Warm front
- c) Stationary front
- d) Rain front



What type of front is formed in this image?

- a) Cold front
- b) Warm front
- c) Stationary front
- d) Rain front



Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

16

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 13

Groundwater When water seeps into soil, it enters groundwater aquifers, or underground layers of rock or soil that water can pass through. As water flows through an aquifer, it eventually reaches a layer of rock that it cannot move through. Fresh water builds up on top of this rock. It can be reached by drilling or digging into the ground and pumping the water up through a well.

Running Water Many cities and towns are built next to sources of running water, such as streams or rivers. Thousands of fresh water rivers cross Earth's surface. Running water provides a source of fresh water for homes, farms, and businesses.

Standing Water Bodies of standing fresh water, such as lakes and reservoirs, are also sources of usable fresh water. A reservoir is an artificial lake built for storage of water. Reservoirs are usually made by building a dam on a river. Water is stored behind the dam and released when needed. Storage is the process of water being stored on Earth's surface, in the ground, or as a water feature.

Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

16

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 13

Which of the following defines fresh water?

1	Water that contains a large amount of salt.
2	Water that contains a large number of bacteria.
<input checked="" type="radio"/>	Water that is suitable for drinking.
4	Water that is heavily polluted.

Which of the following methods can be used to **conserve** water in an ecosystem?

<input checked="" type="radio"/>	building dams and reservoirs to store water
2	allowing water to run off into nearby oceans
3	planting trees that use up a lot of water
4	adding chemicals to the water to make it less acidic

1) Choose the answer that **best** explains one reason why conservation of freshwater is important.

- Freshwater should be conserved because it is limited to Earth's groundwater.
- Freshwater should be conserved because it can be found in large quantities on Earth.
- Freshwater should be conserved because it is limited to Earth's oceans.
- Freshwater should be conserved because it is the only water that can be consumed by humans.

4) Which best explains why it is important for humans to conserve freshwater?

- Earth's water supply is shrinking.
- Earth's water supply is growing larger.
- Once we use all of Earth's freshwater, it is gone forever.
- Only a small fraction of Earth's water is freshwater, and everyone needs it.

Module 1: Earth's Water System

Lesson 1: Water Distribution on Earth

16

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 13

5) Which are sources of freshwater. Select **all** that apply.

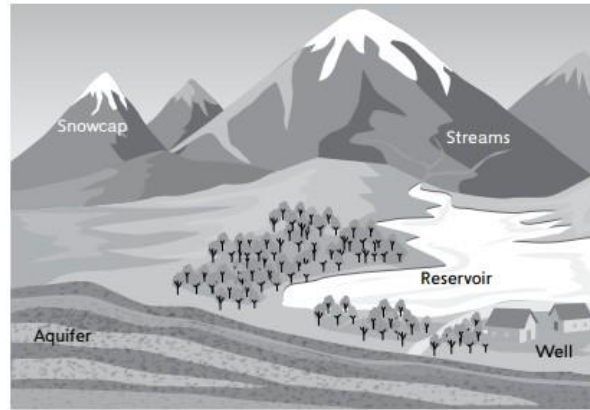
- rivers
- oceans
- aquifers
- reservoirs

A student in the class researches a model of a new well that would provide more groundwater for drinking. The new well would be able to dig through layers of rock that were previously too hard to drill through.

Which of Earth's systems interact within the model of the well?

- (A) atmosphere and biosphere
- (B) atmosphere and geosphere
- (C) hydrosphere and biosphere
- (D) hydrosphere and geosphere

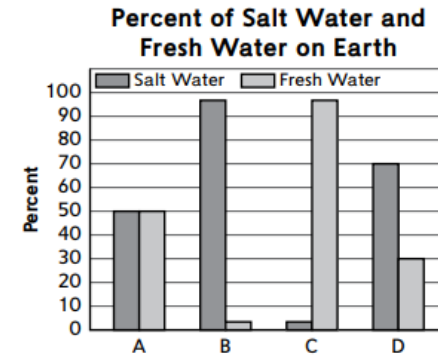
A group of students have been studying the hydrosphere. They wanted to know more about the limited supply of Earth's fresh water, so their teacher showed them the following model.



What conclusion can the students make about Earth's fresh water supply from this model?

- (A) Streams are the only source of fresh water for reservoirs.
- (B) Most well water evaporates and returns to the atmosphere as water vapor.
- (C) There are three main sources of fresh water: groundwater, running water, and standing water.
- (D) The snowcaps are not considered a source of fresh water.

Fresh water makes up only 2.5% of Earth's water supply. The bar graph below represents the amount of salt water compared to the amount of fresh water on Earth.



What conclusion can be made about the importance of conserving fresh water from this graph?

- (A) It is necessary to conserve all sources of fresh water because there is very little in comparison to salt water.
- (B) It is necessary to primarily conserve the ice caps because they are the largest supplier of fresh water.
- (C) Most of the Earth is made up of water, so it is not necessary to conserve fresh water.
- (D) There are multiple sources of fresh water, so it is not necessary to conserve the supply.

Module 1: Earth's Other System

Lesson 2.2: Effects of atmosphere

17

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

U3M2L2 page 89

1. Which of these bring stormy weather?

- A warm front
- B cold front
- C stationary front
- D all the above

How does the movement of air masses in a stationary front differ from that in a cold or warm front?

- a) Rapid movement at a steep angle
- b) Gradual movement at a straight angle
- c) Both move apart at a gradual angle
- d) Both move together at a straight angle

Module 2: Earth's Other System

Lesson 2.1: Effects of Geosphere

18

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

U3M2L1 page 75

Types of Soil

- Each type of soil supports different plant and animal life.
- Forest soil, desert soil, or grassland and prairie soil are three types of soil.

Forest Soil The soil in a forest has a thin layer of topsoil with little humus. Topsoil is home to many living things. Frequent rainfall carries minerals deep into the ground. Plants need long roots to reach these minerals. Much of the forest soil in the United States is in the Northeast and Southeast regions.

Desert Soil Desert soil is sandy and does not have much humus. However, desert soil is rich in minerals. Little rain falls to wash the minerals away. Animals can sometimes be raised in areas with desert soil. Crops can be grown only if water for the plants is piped to the area. Desert soil is found in the Southwestern region.

Grassland and Prairie Soil Grasslands and prairies are found between the Rocky Mountains and eastern forests. Crops, such as corn, wheat, and rye, grow on land from Texas to North Dakota. The soil is rich in humus, which provides nutrients for crops, and holds water so minerals are not washed deep into the ground.

Module 2: Earth's Other System

Lesson 2.1: Effects of Geosphere

18

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

U3M2L1 page 75

8) Different types of soil have different _____, like color.

Correct Answer

properties

Which soil is rich in humus and minerals?

- a) Forest soil
- b) Desert soil
- c) Grassland soil
- d) All the above

Which soil good for growing crops?

- a) Forest soil
- b) Desert soil
- c) Grassland soil
- d) All the above

Which soil is rich in minerals?

- a) Forest soil
- b) Desert soil
- c) Grassland soil
- d) All the above

In which type of soil tall trees grow well?

- a) Forest soil
- b) Desert soil
- c) Grassland soil
- d) All the above

Which soil is poor in minerals?

- a) Forest soil
- b) Desert soil
- c) Grassland soil
- d) All the above

Which of the following is true for grass land soil?

- a) It has a lot of minerals and humus
- b) It is very sandy
- c) Tall trees grow well
- d) All the above

Which of them lists the three types of soil?

- a) Beach, desert and garden soil
- b) Desert, garden and beach soil
- c) Forest, garden and beach soil
- d) Forest, desert and grassland soil

Module 1: Earth's Other System

Lesson 2.1: Effects of Geosphere

19

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

U3M2L1 page 72

Volcanoes form on land and on the ocean floor.

You have learned that a volcano is an opening in Earth's crust. Volcanoes are located only at certain places on Earth's surface. Most volcanoes are found on the ocean floor.

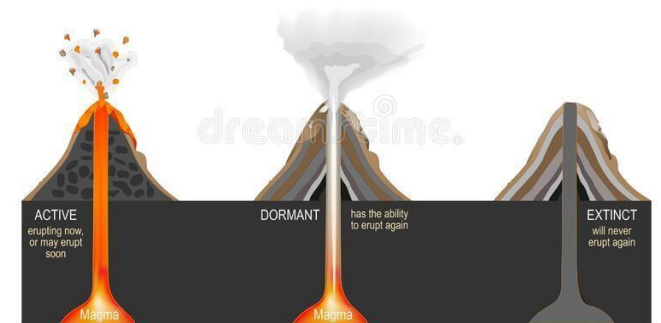
However, volcanoes do not erupt at all continental boundaries. After collecting data about the directions in which parts of Earth slowly moved, scientists concluded that volcanoes tend to erupt where one plate is pushed under another plate. The plate melts under extreme heat and pressure as it is pushed down into the mantle. The melting forms magma, which pools in a chamber underneath the crust.



The magma may rest quietly for hundreds or thousands of years. Sometimes a crack forms above the lava chamber, or the pressure in the chamber becomes too strong to be held in by the rock above it. Then the magma rushes up toward Earth's surface.

An active volcano is one that is currently erupting or has recently erupted. A volcano that has not erupted for some time, but that scientists think may erupt in the future, is called a dormant volcano. A volcano that scientists think will not erupt again is an extinct volcano.

Stages of volcano



Module 1: Earth's Other System

Lesson 2.1: Effects of Geosphere

19

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

U3M2L1 page 72



The picture above shows a volcanic eruption in the island of Hawaii. Which of the following best describes how the volcanic eruption affected the different earth systems on the island?

1	The volcanic eruption caused strong winds and heavy rainfall, resulting in a significant increase in erosion but no other effects on the island.
#	Answer Option
	The volcanic eruption caused lava flows that destroyed buildings and roads, released toxic gases into the air, and polluted nearby water sources.
3	The volcanic eruption caused widespread flooding and erosion but did not affect the air quality on the island.
4	The volcanic eruption caused air pollution and acid rain but did not affect the land or water on the island.

How is an active volcano defined?

- a) Has never erupted before
- b) Is currently erupting or has recently erupted
- c) Has not erupted for some time
- d) Will not erupt again

What characterizes a dormant volcano?

- a) Is currently erupting
- b) Has not erupted for some time but may erupt in the future
- c) Will never erupt again
- d) Erupts frequently

What is an extinct volcano?

- a) Has not erupted for some time
- b) Is currently erupting
- c) Will not erupt again
- d) Erupts continuously

Module 1: Earth's Other System

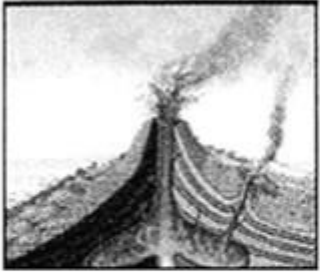
Lesson 2.1: Effects of Geosphere

19

5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

U3M2L1 page 72

2) A volcano is an opening in Earth's crust. When magma rushes to Earth's surface, it is called a(n) _____.



- landslide
- eruption
- dormant
- lava chamber

12) Ecosystems can be changed by natural events or by human actions. Which is an example of a natural event?

- a forest fire started by humans
- toxic smoke pouring out into the atmosphere
- building a road through a prairie ecosystem
- a volcano erupting

Which of the following is true for volcanoes?

- a) Volcanoes form on land only and not in the ocean
- b) Volcanoes form when two Earth's plates lay nest to each other
- c) Volcanoes cannot change Earth shape
- d) Most volcanoes are found on the ocean floor

The figure shows -----flowing on Earth surface.

- a) magma
- b) Hot spot
- c) lava
- d) river



Volcanoes tend to erupt when

- a) One plate is pushes under another plate
- b) Plates push away from each other
- c) Plates collide
- d) Plates push towards each otherr

Module 1: Earth's Water System

Lesson 3: Effects of Hydrosphere

20

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

U3M1L3 page 48

PRIMARY SOURCE



Mississippi Waterways

Look at the map of different water sources in Mississippi.

- What types of water sources do you see on the map?

Answer: There are lakes, rivers and an ocean.

- Is there a pattern of water sources and average annual precipitation?

Answer: There seems to be more rain in the southern part of the state, closer to the ocean.

EOT – TERM 2 – Revision

FRQ – Writing

Inspire Science

Grade – 5

General Stream

Module 1: Earth Water System

Lesson 1: Water Distribution on Earth

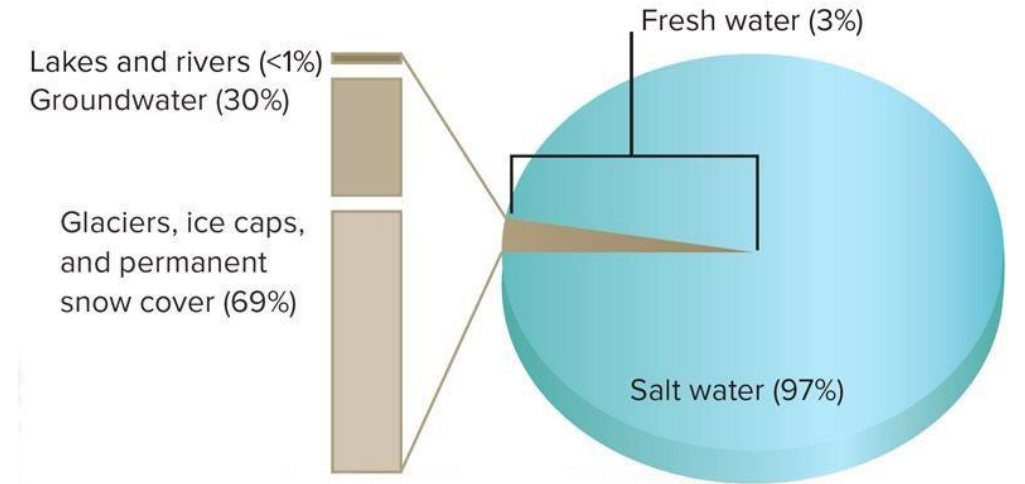
1

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

The water found on Earth makes up the hydrosphere. About 97 percent of Earth's surface water is salt water found in oceans. We cannot drink salt water or use it to grow crops. For those activities, we need fresh water.

Only about 3 percent of Earth's water is fresh water. Most of this fresh water is frozen in the form of permanent snow cover, glaciers, and ice caps. A **glacier** is a thick sheet of ice. A giant **ice cap** covers Antarctica—the continent at the South Pole. This frozen water accounts for about 69 percent of Earth's fresh water. Another 30 percent is groundwater. **Groundwater** is water stored in the cracks and spaces between particles of soil and underground rocks. Less than 1 percent is running water, such as rivers, and standing water, such as lakes. A tiny bit of Earth's water is found in the atmosphere as water vapor.



Module 1: Earth Water System

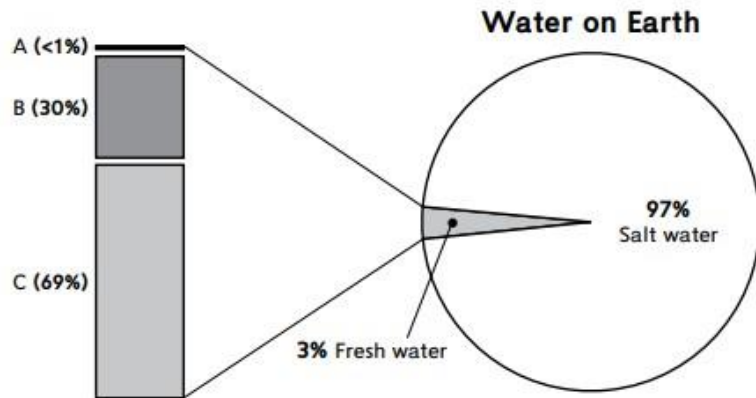
Lesson 1: Water Distribution on Earth

1

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

U3M1L1 page 12

The circle graph represents the total amount of water on Earth. The gray bars to the left show the types of water that make up Earth's fresh water.



Complete the graph by assigning the appropriate labels to A, B, and C from the following options: "Frozen Water"; "Lakes and Rivers"; and "Groundwater."

Identify the types of fresh water that can be used directly by humans. Based on the graph, approximately what percentage of fresh water does this make up?

Lakes, rivers, and groundwater are types of fresh water that can be used by humans. Based on the graph, approximately 31% of fresh water can be used by humans

A. Lakes and Rivers, B. Groundwater, C. Frozen Water

Module 1: Earth Water System

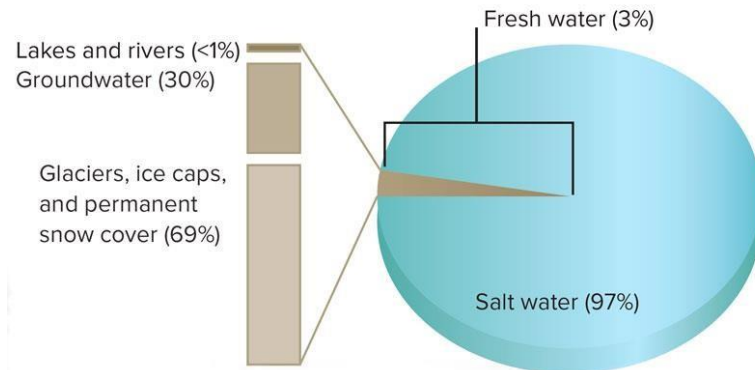
Lesson 1: Water Distribution on Earth

2

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

Figure page 12

U3M1L1 page 12



- Look at the image. Which Earth system is shown in the above image? Explain.

Hydrosphere. The water found on Earth makes up the hydrosphere.

- What are the two types of water found on Earth?

Salt water (97%) and Fresh water (3%)

- Why can't we drink salt water or use it to grow crops?

We can't drink salt water or use it to grow crops because it is not suitable for human consumption or plant growth.

- Why do we need fresh water?

We need fresh water for drinking and growing crops.

- Where do you find the most fresh water?

Most of the fresh water is frozen in the form of permanent snow cover, glaciers, and ice caps. About 69 percent of Earth's fresh water is frozen.

- How is water found in the atmosphere?

Water vapor

Fill in the blanks with the keywords

1. **Ground water** is water stored in the cracks and spaces between particles of soil and underground rocks.
2. **Glacier** - A large sheet of ice that moves slowly across the land.
3. **Ice caps** - A covering of ice over a large area such as in the polar region

Module 1: Earth Water System

Lesson 1: Water Distribution on Earth

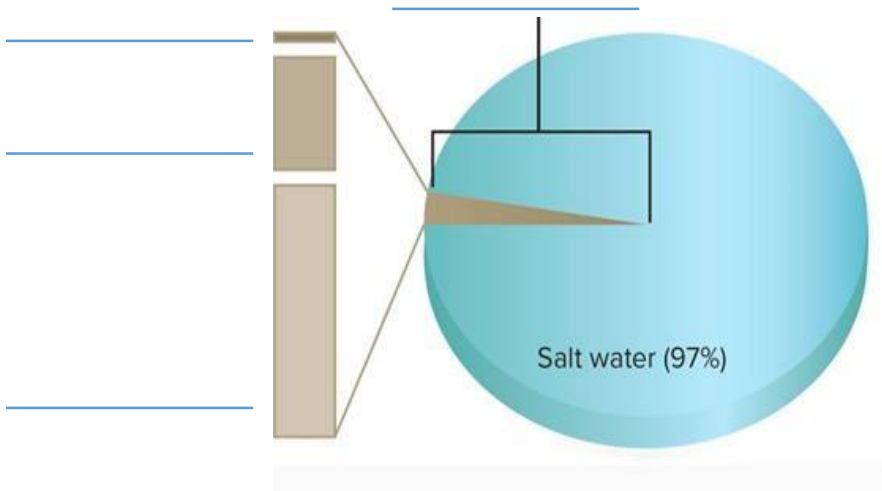
2

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

Figure page 12

U3M1L1 page 12

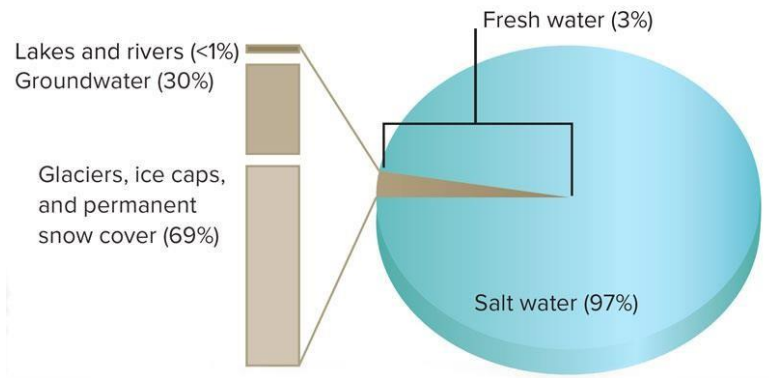
Label it



3) Why is groundwater important for living things to be able to use?

Water seeps into the ground and is stored in the soil. This water can be absorbed by the roots of plants to survive and grow.

Answer



Module 1: Earth Water System

Lesson 1: Water Distribution on Earth

2

5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.

Figure page 12

U3M1L1 page 12

Look at the image and answer the questions.



(i) This is a source of fresh water. Name it.

Glaciers

(ii) What is its percentage?.....**69%**

Module 1: Earth Water System

Lesson 2: Human Impact on water resources

3

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 26

Humans Affect Water

Page : 26

People affect the environment every day. Sometimes these effects are negative and can harm the environment, such as pollution. Pollution is any harmful substance that affects Earth's resources.

Heavy rains can wash fertilizers used on farms and lawns into lakes, rivers, and streams. These fertilizers can negatively impact water quality and cause toxic kinds of algae to grow. This can result in something called an **algal bloom**, a sometimes harmful increase in the amount of algae found in water. Oil spills are another cause of water pollution. In 2010, the worst oil spill in United States history occurred when an oil rig in the Gulf of Mexico exploded, releasing 4.9 million barrels of oil into the gulf. That amount of oil could fill over 300 Olympic-sized pools!

Even though some human activities harm natural resources, there are many people who work hard to protect them. In 1974, the United States government passed a law to help protect our water. The Safe Drinking Water Act protects drinking water and water resources. Farmers are now using safer, more natural ways of controlling pests and providing nutrients to plants.



The green water is evidence of an algal bloom. Algal blooms can be harmful.



Zebra mussels can filter feed. They eat the good algae but release the organisms that contribute to the algal bloom back into the water intact.




Module 1: Earth Water System

Lesson 2: Human Impact on water resources

3

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 26

Image	Type of pollution	How it is formed?
	Algal bloom	Heavy rains wash fertilizers used on farms into lakes, rivers and streams
	Oil Spills	Spilling of oil into water resources
	Acid Rain	Burning fossil fuels

Arrange the steps of algal bloom formation :

Step (.²....): Heavy rain washes fertilizer from the soil into the water environment.

Step (.....¹): Fertilizers are added to plants and food crops.

Step (.⁴....): Algal bloom harms organisms that live in the water ecosystem .

Step (.³....): Fertilizer causes the fast growth of algae

How do farmers prevent water pollution caused by algal bloom?

By natural ways of controlling pests and providing nutrients to plants.

Module 1: Earth Water System

Lesson 2: Human Impact on water resources

4

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 27

Conservation

Earth does not have an unlimited supply of natural resources. Many resources are being used more quickly than nature can replace them. Humans can help slow the use of natural resources through conservation.

Conservation is the practice of using resources wisely. The “three Rs” guide people in how to conserve resources.

They are reduce, reuse, and recycle.

In terms of conserving water resources, reducing our usage means to use less water. This can mean taking shorter showers and turning the water off while we are brushing our teeth.

Reusing water resources means using it for something else or using it more than once. Rainwater can be collected to be used to water plants.

Recycling water is a complicated process that is done at water treatment facilities. Water that is collected through pipes in homes and offices can be recycled to be used again.



Use water-conserving showerheads and take shorter showers.



Do not leave water running when you are not using it.

If you use a dishwasher, use a water-saving model and do not run it unless it is full.



Use a water-saving washing machine and wash full loads of clothes.



Fix leaking pipes or faucets.



Grow plants that do not require frequent watering, and water your plants after dark so the water does not evaporate.



Module 1: Earth Water System

Lesson 2: Human Impact on water resources

4

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 27

1. List two ways to conserve water. Explain why it is helpful for the environment.

Water can be conserved by taking shorter showers or turning off faucets when not using them. It is important to conserve because fresh water is a limited resource in the environment

2. Identify the type of three R's. **Reducing**

(i) Taking shorter shower

(ii) Turning of the water while brushing **Reducing**

(iii) Rainwater can be collected to be used to water plants
..... **Reusing**

(iv) Water that is collected through pipes in homes and offices can be recycled to be used again..... **Recycling**

3 – Answer the following questions.

Conservation is the practice of using resources wisely.

The “Three Rs” guide people in how to conserve resources.

A. List the “Three Rs”?

- **Reusing**
- **Recycling**
- **Reducing**

B. How could you conserve the water in the adjacent figure?

Fix leaking pipes or faucet



Module 1: Earth Water System

Lesson 2: Human Impact on water resources

5

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 29

Effects of Acid Rain

Acid rain results when gases, such as sulfur dioxide and nitrogen oxide, are released into the atmosphere. A small portion of the gases that cause acid rain comes from natural sources such as volcanoes. Most of the gases come from burning fossil fuels. These gases react with water, oxygen, and other chemicals to form acids. These acids mix with water before falling as precipitation.

The effects of acid rain are seen mostly in water environments, such as streams, lakes, and marshes. It can be harmful to fish and other wildlife. If something harms one part of an ecosystem — one species of plant or animal, the soil, or the water — it can have an impact on everything else.

Some types of plants and animals can live in acidic waters. Others are acid-sensitive and will be lost as acid rain enters the ecosystem. Some acidic lakes have no fish. Even if a species of fish or animal can tolerate moderately acidic water, the animals or plants it eats might not.



Acid rain has destroyed this forest.

Module 1: Earth Water System

Lesson 2: Human Impact on water resources

5

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 29

1. What can be done to reduce or prevent further acid rain damage?

Sample answer: If we reduce the burning of fossil fuels or keep more of the chemicals that cause acid rain from going into the atmosphere, there will be less acid rain.

2. Write the effects of acid rain.

- It is harmful to fish and other wild animals.
- It harms plants, animals, soil and the water.



1. What has destroyed this forest?

Acid rain

2. Name the gases which cause this pollution.

Sulfur dioxide and nitrogen oxide

3. Name the natural resources which produce this gases.

volcanoes

4. How do most of this gases come from?

Burning fossil fuels

Module 1: Earth Water System

Lesson 2: Human Impact on water resources

5

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

U3M1L2 page 29

3- Write the number of the correct answer on the space.

.....**1**..... Environment

.....**2**..... .Pollution

.....**3**..... Algal bloom

.....**4**..... Acid rain

.....**5**..... Conservation

1- Everything around us.

2- Any harmful substance that affects earth.

3- Rapid increase in the population of algae.

4- Result when sulfur dioxide (SO₂) and nitrogen oxides (NO₂) emitted in atmosphere.

5- Practices of using water to Reduces unnecessary water usage.