

Academic Year	2023/2024
السنة الدراسية	2023/2024
Term	2
الترم	2
Subject	Science/Inspire
المادة	العلوم/الاستلهام
Grade	5
الصف	5
Stream	General
التخصص	العام
Number of MCQ	15
عدد الأسئلة المتعددة الخيارات	15
Marks of MCQ	60
درجة الأسئلة المتعددة الخيارات	60
Number of FRQ	5
عدد الأسئلة القصيرة	5
Marks per FRQ	40
درجة الأسئلة القصيرة	40
Type of All Questions	MCQ/ الأسئلة المتعددة الخيارات FRQ/ الأسئلة القصيرة
نوع الأسئلة	MCQ/ الأسئلة المتعددة الخيارات FRQ/ الأسئلة القصيرة
Maximum Over all Grade	100
الدرجة القصوى للمرحلة	100
Exam Duration	150 minutes
مدة الاختبار	150 minutes
Mode of Implementation	Paper Based
نمط التنفيذ	Paper Based
Calculator	Not Allowed
المساعدات الحاسبة	غير مسموح بها

Question* السؤال	Learning Outcome/Performance Criteria** النتائج المتوقعة/معايير الأداء**	Reference(s) in the Student Book (English Version) المراجع في كتاب الطالب (الطبعة الإنجليزية)	
		Example/Exercise مثال/تمرين	Page الصفحة
الأسئلة القصيرة (FRQ)	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
	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
	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
	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
	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
الأسئلة المتعددة الخيارات (MCQ)	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	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
*	Questions might appear in a different order in the actual exam, or on the exam paper in the case of G3 and G4.		
**	كما وردت في كتاب الطالب و LMS و ورقة الامتحان .		

EOT2 – Unit 3 Coverage (MCQ)

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.

1. 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 materials moving from one place to another.
2. 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.
3. 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. A volcano erupted and lava flowed over the beach.
 - b. The cold weather caused the beach to change.
 - c. Wind and water eroded the beach.
 - d. Oxygen in the air reacted with the sand.

4.

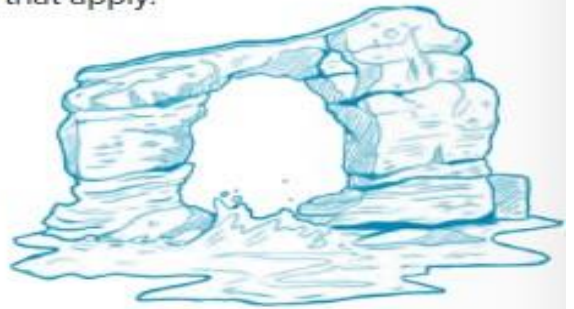
Students in a science class are building models to demonstrate how Earth's systems interact.

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.**

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

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



6. 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.
- D. Erosion carries the sediment and rock to another location, which changes the shape of the land.

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

- a. follow straight path.
- b. has more energy.
- c. carries heavier sediments.
- d. follow curved path.

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

a.	rocks from mountains moved to the beach
b.	the change of seawater temperature over the summer
c.	sand temperature changes at night
d.	seawater color changes at night

9. Can ocean waves change the rocks along a coastline?

- | | |
|----|--|
| a. | Yes. Pounding waves break rocks into smaller pieces. |
| b. | Yes. Pounding waves glue smaller rocks together. |
| c. | No. Waves are too weak to change rocks. |
| d. | Maybe. Scientists are not sure. |

10. What happens when erosion and deposition work together?



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

11. 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?

- | | |
|----|---|
| a. | wind and water eroded the rock |
| b. | nitrogen in the air reacted with the rock |
| c. | foggy weather caused the rock to become smaller |
| d. | sun heated the rock which caused the rock to become smaller |

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.

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

- a. Biosphere
- b. Geosphere
- c. Hydrosphere
- d. Atmosphere



13. Water that falls from the atmosphere is called

- a. precipitation
- b. temperature
- c. wind
- d. air pressure

14. What is the atmosphere?

- a. It is a layer of gas that surrounds earth.
- b. It is a layer of solid that surrounds earth.
- c. It is a layer of water that covers earth.
- d. It is a layer of soil that covers earth.

15. 4) The _____ includes all the gases around Earth.



- a. hydrosphere
- b. crust
- c. atmosphere
- d. cloud

16. Which statement describes how clouds form?

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

17. Where does the water go when water evaporates from a puddle on the street?

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

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.

The figure below shows the average temperature and average snowfall of three cities in January.

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)

18. Which city is the coldest in January?

- a. Albany, NY
- b. Tahoe City, CA
- c. Reno, NV

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

20. How is evaporation related to precipitation?
- Precipitation forms in the clouds when water vapor condenses into bigger and bigger droplets of water. When the drops are heavy enough, they fall to the earth.
 - Precipitation forms in the clouds when water vapor evaporates into smaller droplets of water. When the drops are heavy enough, they fall to the earth.
 - Precipitation forms in the clouds when water melts in the form of droplets of water. When the drops are heavy enough, they fall to the 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.
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.

21. Less than 1 percent of Earth's fresh water is readily available for human and animal use.

Where is **most** of the remaining fresh water?

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

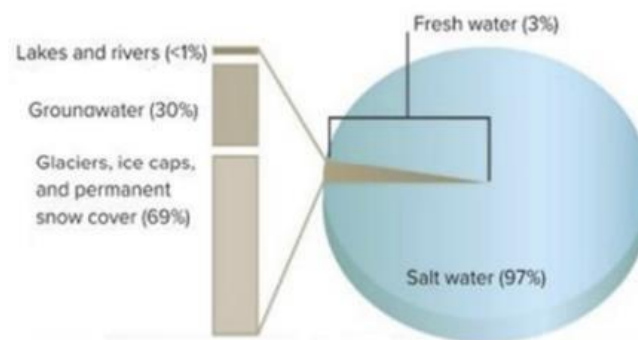
22. What can you infer about the **percentage** of ground ice and permafrost if the table below shows all sources of fresh

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.
- b. 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.

23. Based on the pie graph below, what can you infer about water on earth?



- a. Fresh water is abundant on Earth, while salt water is limited.
- b. Salt water is abundant on Earth, while fresh water is limited.
- c. There is an equal amount of salt water and fresh water on Earth.
- d. Fresh water is located mostly in lakes and rivers.

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

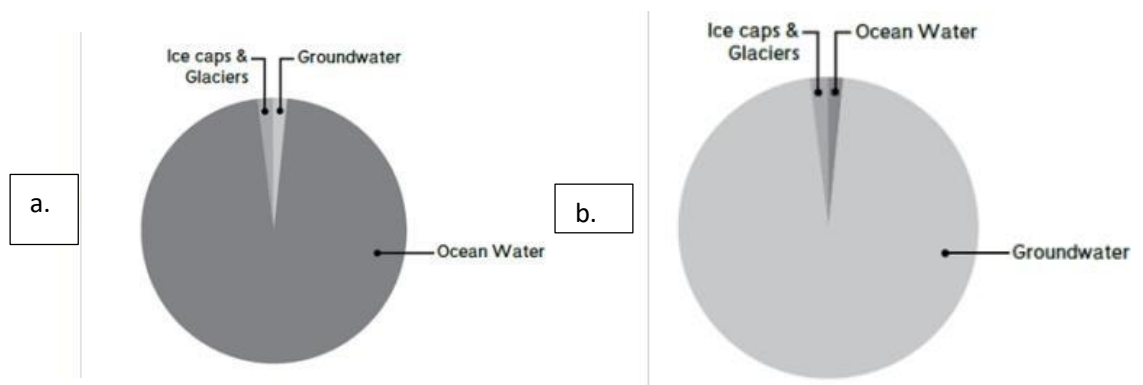
- a. Geosphere
- b. Hydrosphere
- c. Atmosphere
- d. Biosphere

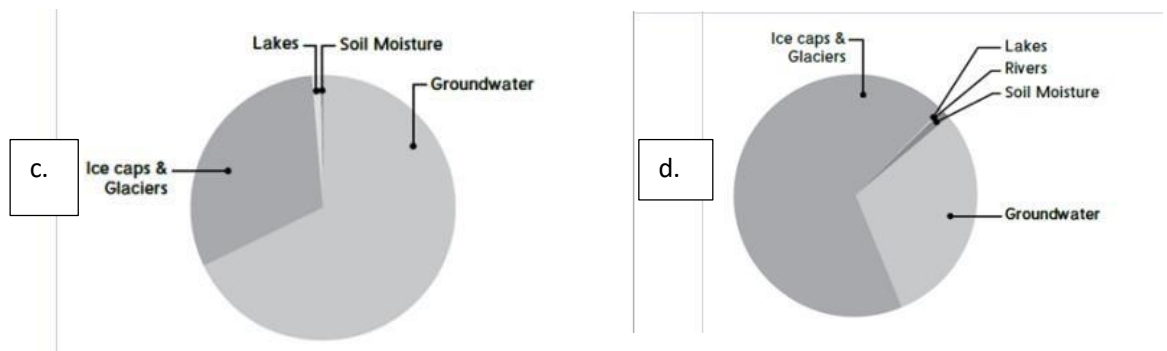


25. Which of the following water resources contains the largest amount of fresh water on earth?

a.	rivers
b.	oceans
c.	streams
d.	ice caps

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



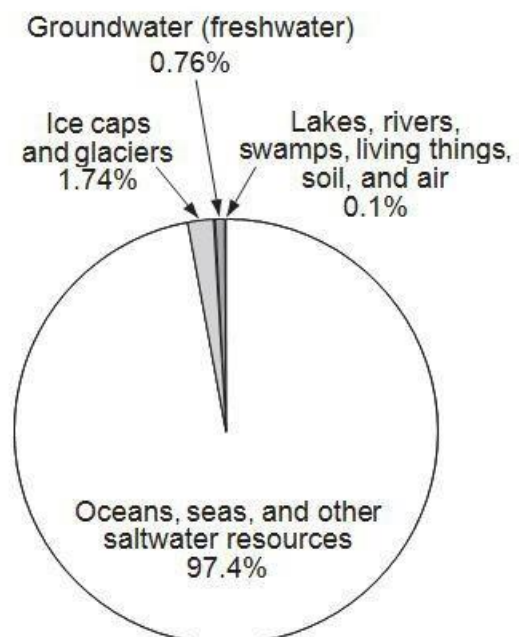


27. Fill in the blanks using the available answer choices. Lakes and rivers are part of the
- hydrosphere
 - Geosphere

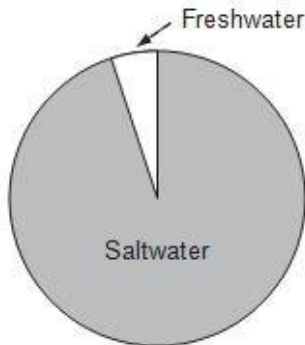
28. Based on the graph above, what can you conclude about the water on Earth?

- 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.

Distribution of Water on Earth



29. What can you infer about water on Earth based on the pie graph?



- a. Freshwater is abundant on Earth, while saltwater is limited.
- b. 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 ice caps and glaciers.

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

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

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

32. How are glaciers and oceans similar?

- a. Both contain salt water and are difficult for humans to use.
- b. Both contain freshwater and are difficult for humans to use.
- c. Oceans contain salt water and glaciers contain fresh water, but both both are difficult for humans to use.
- d. Oceans contain salt water and glaciers contain fresh water, and both both are easy for humans to use.

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.

33. 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
- d. The average weather pattern of a region over time

34.

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

35. What are some important **variables** in determining the **climate**?

- a. Temperature and precipitation.
- b. Average snowfall and rainfall
- c. Temperature and location
- d. Temperature and average rainfall

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.

36. How are floods and hurricanes **related**?

- a. Hurricanes can cause storm surges that lead to floods.
- b. Hurricanes cause less damage than floods.
- c. Hurricanes occur after floods and storm surges reach the land.
- d. Hurricanes occur before floods and storm surges reach the land.

37. The place that floods easily when river water rises is called_____?

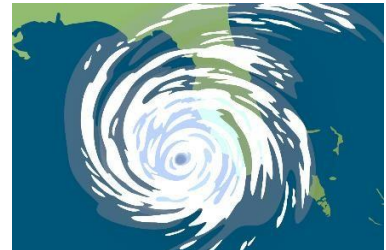
- a. Flood
- b. Floodplain
- c. Hurricane
- d. Storm surges

38. Floods can cause damage by_____?

- a. Adding nutrients to the soil to hep plants grow
- b. Carrying mud into homes and streets
- c. Forming a storm surge
- d. Increasing the amount of rainfall

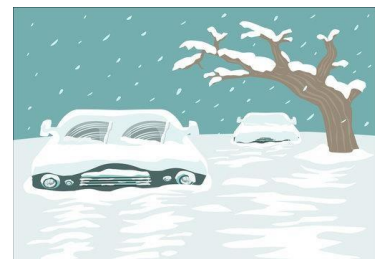
39. Which of the following **represents** the image shown below?

- a. Thunderstorms
- b. Hurricane.
- c. Winter storm
- d. Weather



40. Which of the following **represents** the image shown below?

- a. Thunderstorms
- b. Tornados
- c. Winter storm
- d. Weather



41. 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

42. 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

43.



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

- a. Floods have no effect on the land.
- b. Floods deposit sediments and enrich the soil.
- c. Floods only move animals.
- d. Floods only affect the nearby aquatic life.

44

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

A 

Hydrosphere

B 

Hurricane

C 

Glacier

D 

Erosion

45.

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

A 

Weathering

B 

storm surge

C 

Erosion

D 

Deposition

46.

A place that floods easily when river water rises.

A 

Glacier

B 

Weathering

C 

Floodplain

D 

Erosion

47.

When water collects on land that is normally dry.

A 

Weathering

B 

Glacier

C 

Flood

D 

Erosion

48.

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

A 

storm surge

B 

Hydrosphere

C 

Deposition

D 

Hurricane

49.

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

A 

Floodplain

B 

storm surge

C 

Erosion

D 

Weathering

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

- a. natural wetlands
- b. cutting down plants along a river
- c. draining wetlands
- d. during a heavy rainfall

51. Which evidence could indicate that a flood has happened in an area?

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

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.

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

- a. tropical storm
- b. winter storm
- c. thunder storm
- d. tornadoes

53. 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

54. What is one of the primary dangers associated with hurricanes?

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

55. 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

56. What is the center of a hurricane called?

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

57. 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

58. 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

59. 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

60

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

- volcano eruption
- hurricane
- erosion
- earthquake

61. 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

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

- tropical storm
- tornado
- hurricane
- blizzard

14. 3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are reconsidered to identify aspects of a model or prototype that can be improved.

63. 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.

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

- a. floodplain
- b. storm surge
- c. delta
- d. alluvial fan

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

- a. floodplain
- b. storm surge
- c. delta
- d. alluvial fan

66. When water that is carrying sediment enters a large body of water, the sediment is dropped, forming a

- a. Canyon
- b. Alluvial fan
- c. Delta
- d. River



67. When a rushing river runs out of a narrow canyon, it slows down and becomes shallower sediment is dropped causing a

- a. Curved river
- b. Alluvial fan
- c. Delta
- d. Canyon



68. Are deltas and alluvial fans **alike**?

- a. Both are formed by deposition of sediments.
- b. Both are formed by erosion.
- c. Both make a river.
- d. Both are formed quickly.

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.
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.

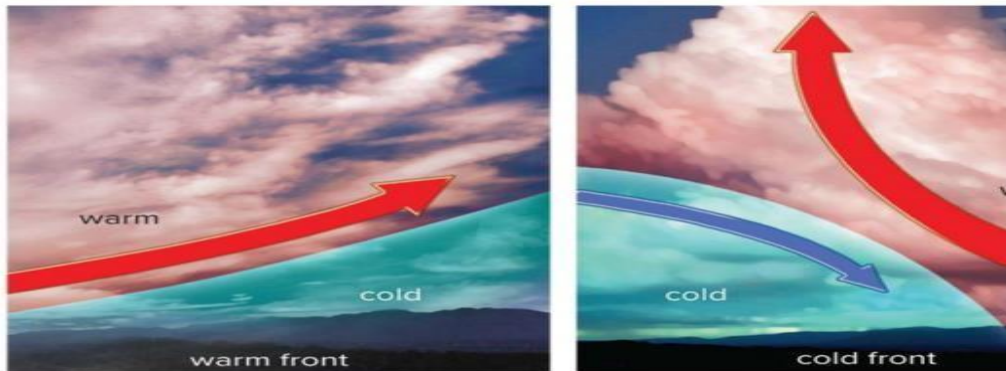
69. Which of these bring stormy weather?

- a. warm front
- b. cold front
- c. stationary front
- d. all the above

70. 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

71.



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?

a	In the cold front cold air masses rises at a steep angle, while in the warm front cold air rises at a gradual angle.
b	In the cold front warm air masses rises at a steep angle, while in the warm front warm air rises at a gradual angle.
c	In the cold front warm air masses rises at a steep angle, while in the warm front cold air rises at a gradual angle.
d	In the cold front cold air masses rises at a steep angle, while in the warm front warm air rises at a gradual angle.

72. 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

73. 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

74. What type of precipitation is often associated with warm fronts?

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

75. 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

76. 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

77. What type of front is formed in this image?

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



78. What type of front is formed in this image?

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



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.

79

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

a

Freshwater should be conserved because it is limited to Earth's groundwater.

b

Freshwater should be conserved because it can be found in large quantities on Earth.

c

Freshwater should be conserved because it is limited to Earth's oceans.

d

Freshwater should be conserved because it is the only water that can be consumed by humans.

80

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

a

Earth's water supply is shrinking.

b

Earth's water supply is growing larger.

c

Once we use all of Earth's freshwater, it is gone forever.

d

Only a small fraction of Earth's water is freshwater, and everyone needs it.

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

a

building dams and reservoirs to store water

b

allowing water to run off into nearby oceans

c

planting trees that use up a lot of water

d

adding chemicals to the water to make it less acidic

- 82- 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
- 83- 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.

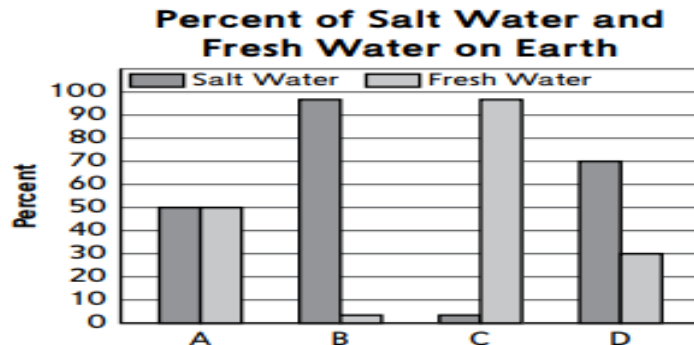


What conclusion can the students make about Earth's fresh water supply from this model?

- (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.

84-

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.

18

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

85. In which type of soil can we grow crops?

- a. Desert soil
- b. Forest soil
- c. Grassland soil
- d. Street soil

86. What can be done to make the desert soil like the grassland soil?

- a. Remove humus and add minerals.
- b. Add humus and minerals.
- c. Remove minerals and add humus.
- d. Remove minerals and humus.

87. In which type of soil, we have large and high trees?

- a. Desert soil
- b. Forest soil
- c. Grassland soil
- d. Mountain soil

88. How can forest soil protect us from floods?

- a. Forest soil has no effect on floods.
- b. Forest soil Increases the number of crops like corn and wheat.
- c. Forests can soak up excess rainwater, preventing run-offs and damage from flooding.
- d. None of the above

89. Which soil is rich in minerals?

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

90. Which soil is poor in minerals?

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

91. 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

92. 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

19

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

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.

93. Most volcanoes are found on the_____?

- a. Ocean floor
- b. Street floor
- c. Land

94. How do volcanoes form?

- a. When one plate pushed against another plate
- b. When one plate pushed under another plate
- c. When one plate rubs past another plate

95. Look at the map of **different water resources** in Mississippi. What types of water resources do you see according to the numbers?

- a. Rivers, lakes, and streams
- b. Lakes, rivers, and ocean
- c. Rivers, ponds, and reservoirs

96. Why area A experience more rainfall than area B?

- a. It is near the ocean.
- b. B is in the south while A in the north
- c. B is close to the equator while A is away from it.



97. 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

98. What is an extinct volcano?

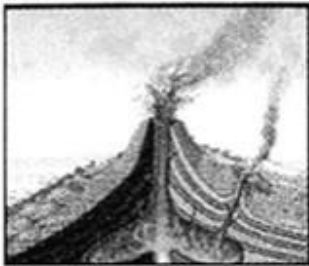
- a) Has not erupted for some time
- b) Is currently erupting
- c) Will not erupt again
- d) Erupts continuously

99. The figure shows _____ flowing on Earth surface.

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



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



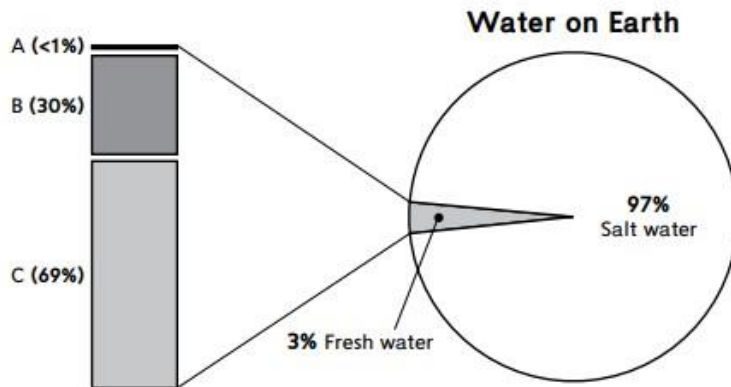
- landslide
- eruption
- dormant
- lava chamber

EOT2 – Unit 3 Coverage (FRQ)

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.
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.

1.

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.



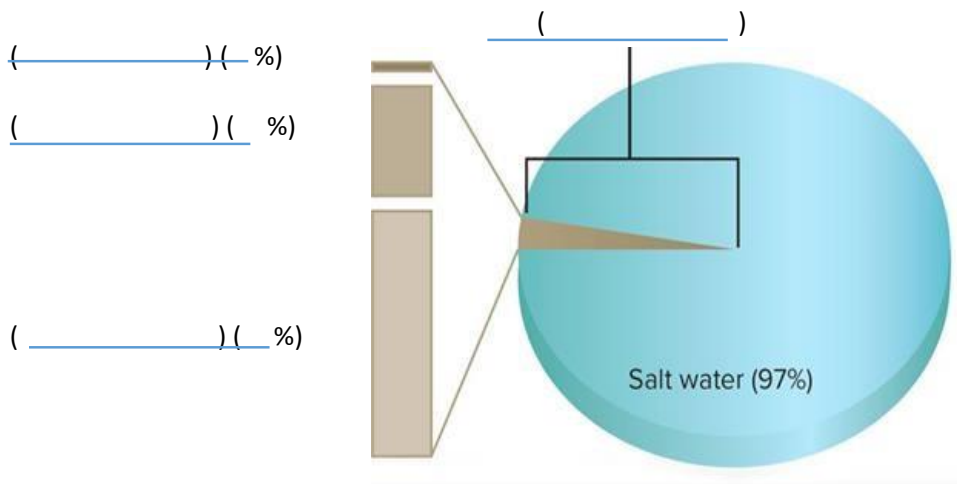
Complete the graph by assigning the appropriate labels to A, B, and C from the following options: "Frozen Water"; "Lakes and Rivers"; and "Groundwater."

- 2- 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?

3- **Complete** the sentences below with the correct word:

- a. A thick sheet of ice is called _____.
- b. _____ covers Antarctica- the continent at the South pole.
- c. The water stored in the cracks and spaces between particles of soil and undergroundwater is called _____.

4- **Label** the diagram. Fill the boxes with the correct words and percentages.



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

6- Look at the image and answer the questions.



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

.....

(ii) What is its percentage?

.....

7- Fill in the blanks with the keywords

- a.is water stored in the cracks and spaces between particles of soil and underground rocks.
- b.– A large sheet of ice that moves slowly across the land.
- c.– A covering of ice over a large area such as in the polar region

8- How is water found in the atmosphere?

.....

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.
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.
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.

9- Arrange the steps of algal bloom formation :

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

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

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

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

10- How do farmers prevent water pollution caused by algal bloom?

.....

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

1-

2-

.....

12- Identify the type of three R's.


(i) Taking shorter shower

(ii) Turning of the water while brushing




(iii) Rainwater can be collected to be used to water plants

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

.....

13	<p>– Answer the following questions.</p> <p>Conservation is the practice of using resources wisely.</p> <p>The “Three Rs” guide people in how to conserve resources.</p> <p>A. List the “Three Rs”?</p> <ul style="list-style-type: none"> ● ● ● <p>B. How could you conserve the water in the adjacent figure?</p> <p>.....</p> <div style="text-align: right;">  </div>
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14-

Image	Type of pollution	How it is formed?
		
		
		

15- What can be done to reduce or prevent further acid rain damage?

.....

16- Write the effects of acid rain.

.....
.....

17-



Complete the sentence.

a- Burning release gases such as sulfur dioxide and nitrogen oxide into the atmosphere causing .

Answer the following questions:

b- The effects of acid rain are seen mostly in water environments, such as streams and lakes. It can be harmful to fish and wildlife. What can be done to reduce or prevent further acid rain damage?

.....
.....

C. What has destroyed this forest?

.....

d. Name the gases which cause this pollution.

.....

e. Name the natural resources which produce this gases.

.....

Write the number of the correct answer on the space.

- Environment
- Pollution
- Algal bloom
- Acid rain
- 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.

19-

Mississippi Waterways

Look at the map of different water sources in Mississippi.

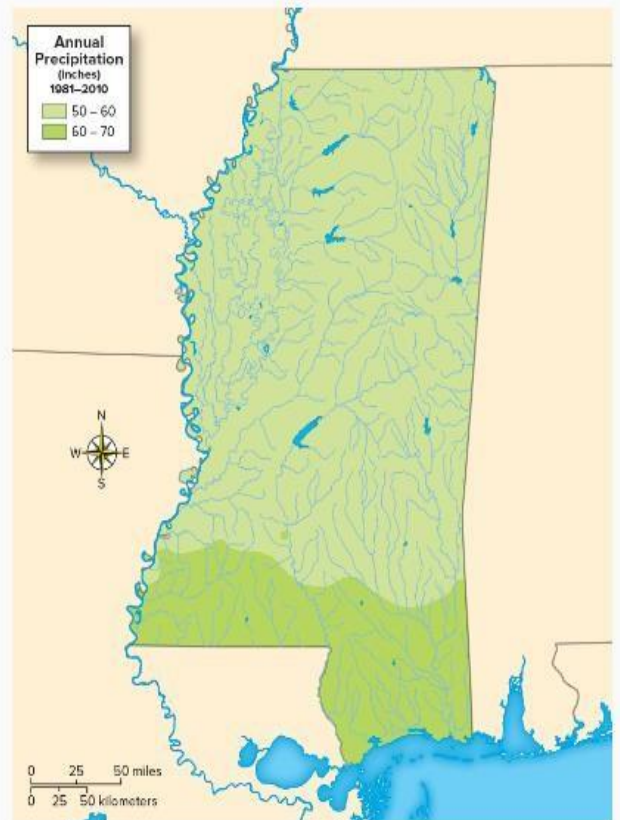
a- What types of water sources do you see on the map?

Answer:

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

Answer:

PRIMARY SOURCE



Answer:

(MCQ)

- 1- D
- 2- C
- 3- C
- 4- B
- 5- A, b, c
- 6- D
- 7- D
- 8- a
- 9- a
- 10- d
- 11- a
- 12- d
- 13- a
- 14- a
- 15- c
- 16- b
- 17- c
- 18- a
- 19- a
- 20- a
- 21- a
- 22- b
- 23- b
- 24- b
- 25- d
- 26- a
- 27- a
- 28- a
- 29- b
- 30- store.
- 31- A
- 32- C
- 33- D
- 34- Lower.
- 35- A
- 36- A
- 37- B
- 38- B
- 39- B
- 40- C
- 41- Storm surge.
- 42- Hurricane.
- 43- B
- 44- D
- 45- D
- 46- C
- 47- C
- 48- d

49- b
50- a
51- d
52- a
53- c
54- c
55- c
56- c
57- c
58- b
59- c
60- hurricane.
61- C
62- Blizzard.
63- D
64- C
65- D
66- C
67- B
68- A
69- B
70- D
71- B
72- C
73- B
74- C
75- C
76- B
77- B
78- C
79- D
80- D
81- A
82- D
83- C
84- A
85- C
86- C
87- B
88- C
89- B
90- A
91- A
92- D
93- A
94- B
95- B
96- A
97- B
98- C

99- C
100- Eruption

(FRQ)

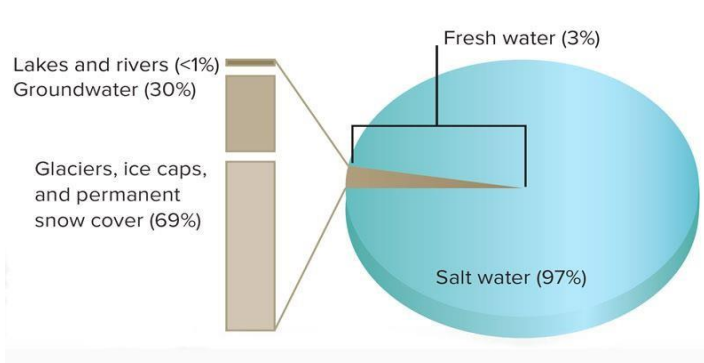
1- A. Lakes and Rivers, B. Groundwater, C. Frozen Water.

2- 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

3-

- a- glacier
- b- ice caps
- c- groundwater

4-



5- 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.

6- i) glacier

ii) 69%

7-

- a. Ground water
- b. Glacier
- c. Ice caps

8- Water vapor

9-

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

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

11- 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.

12-

- i) Reducing
- ii) Reducing
- iii) reusing
- iv) recycle

13-




A) Reusing

Recycling

Reducing

b) Fix leaking pipes or faucet

14-

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

15-

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.

16-

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

17-

- a- fossil fuels
- b- reducing burning fossil fuels.
- c. Acid rain
- d. Sulfur dioxide and nitrogen oxide
- c. volcanoes

18

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.**

19-

- a. There are lakes, rivers and an ocean.
- b. There seems to be more rain in the southern part of the state, closer to the ocean.