

# 7<sup>th</sup> Grade SCIENCE EXIT TEST – PART 2

## EARTH'S MATERIAL RESOURCES

### Minerals, Soil, & Rocks

1. Soil is made up of rocks, \_\_\_\_\_, and organic matter
  - a. Plastic
  - b. plants
  - c. minerals
2. We need soil to grow:
  - a. Water
  - b. air
  - c. plants
3. Minerals are \_\_\_\_\_ sources.
  - a. Natural
  - b. artificial
  - c. man-made
4. Name the following rocks and minerals:



### Rock Types: Igneous, Sedimentary, Metamorphic

1. Mostly found on the surface of the Earth: \_\_\_\_\_
2. Formed from molten magma: \_\_\_\_\_
3. Formed from Sediments: \_\_\_\_\_
4. Formed from Sedimentary rocks that undergo pressure and heat: \_\_\_\_\_
5. Also called a Fire Rock: \_\_\_\_\_

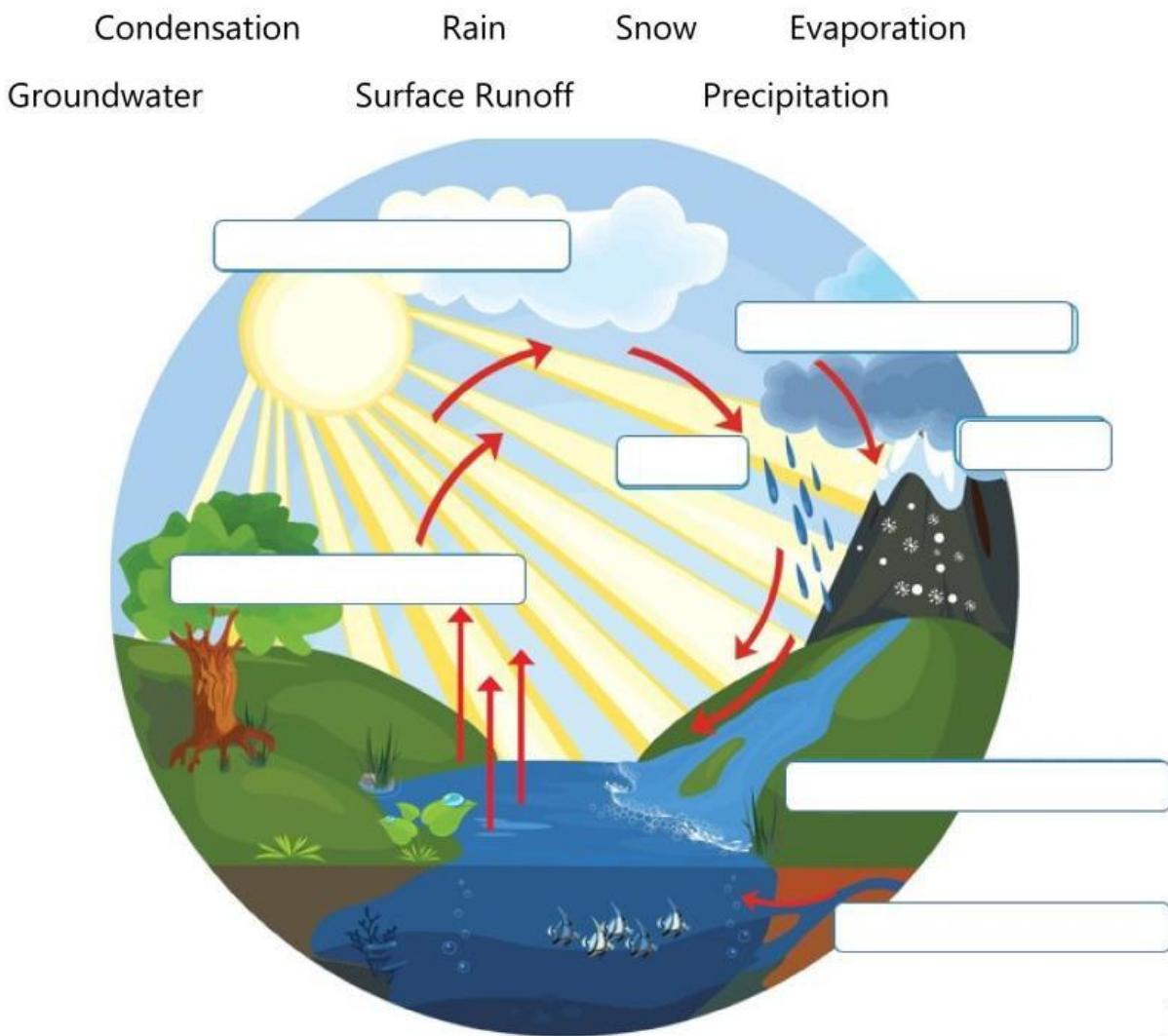
### The Rock Cycle

1. Which type of rock forms in layers?
  - a. Sedimentary
  - b. metamorphic
  - c. igneous
2. \_\_\_\_\_ forms from plant and animal matter buried with the Earth.
  - a. Erosion
  - b. metamorphic rock
  - c. Petroleum
3. Evidence of organisms that lived on Earth long ago would most likely be found in \_\_\_\_\_ rock.
  - a. Sedimentary
  - b. metamorphic
  - c. igneous

## Properties of Water & Ice

1. Which process makes ice become liquid on a hot day?
  - a. Freezing
  - b. Melting
  - c. Boiling
2. Which of the following does NOT happen when water is frozen?
  - a. It solidifies
  - b. It contracts
  - c. It expands
3. Which answer shows the process of boiling?
  - a. Liquid – heat → gas
  - b. Gas + heat → liquid
  - c. Liquid + heat → gas

## The Water Cycle: Use the words below to complete the diagram of the Water Cycle



## The Water Crisis

1. What kind of water do people need?
  - a. Freshwater
  - b. saltwater
  - c. wastewater
2. What is desalination?
  - a. Adding salt to water
  - b. taking salt out of water
  - c. cleaning the ocean

## Matching: Match the words to the correct meaning

Famine	A source of water from the ground
Drought	Shortage of food
Spring	A long time with no rain
Glacier	Water that falls from the sky as rain or snow

## **PLATE TECTONICS**

### What are Tectonic Plates?

1. Divergent boundaries:
  - a. Pull away or separate from each other
  - b. Pull towards each other
  - c. Slide horizontally past each other
2. Convergent boundaries are where:
  - a. Crust pulls away from each other
  - b. Crusts slide past each other
  - c. Crusts come together
3. What is an enormous chain of volcanoes called?
  - a. Arrow of Fire
  - b. Ring of Volcanoes
  - c. Ring of Fire
4. Plate tectonics drive the:
  - a. Water cycle
  - b. Life cycle
  - c. Rock cycle

### Unified Theory of Plate Tectonics

1. The theory of plate tectonics is that the surface of the earth is broken into larger pieces of crust called \_\_\_\_\_, that ride along on a softer layer of earth.
  - a. Waves
  - b. Plates
  - c. The mantle
2. The hard outer layer of the Earth is called:
  - a. Hydrosphere
  - b. Lithosphere
  - c. Geosphere
3. The Plate Tectonics theory allows geologists to identify many geologic \_\_\_\_\_ before they effect humans.
  - a. Hazards
  - b. Formations
  - c. history

## Causes of Tectonic Plate Movement

1. What happens when two of the Earth's plates move side by side?  
a. A volcano is formed      b. an earthquake happens      c. an ocean is made
2. Scientists believe that someday the Earth's plates may move and create one large:  
a. Ocean      b. continent      c. country

## Convergent & Divergent Boundaries

1. Convergent Boundaries:  
a. come together      b. don't move at all      c. move apart
2. Divergent Boundaries:  
a. Move together      b. move apart      c. move past each other

## Theory of the Continental Drift

1. The Continental Drift theory is most associated with:  
a. Fernando Cortez      b. Alfred Wegner      c. Christopher Columbus
2. The Continental Drift is the idea that the Earth's continents were once joined together as a single landmass called \_\_\_\_\_ and have drifted apart to their current positions.  
a. Perdio      b. Pangaea      c. Panama

## Expanding Earth and The Theory of Pangaea

1. Pangaea means:  
a. Ocean tides      b. entire earth      c. full ocean
2. What are some evidences of Pangaea?  
a. Plant and animal fossils      b. marine life      c. poisonous plants

## **UNDERSTANDING EARTHQUAKES**

### What Causes an Earthquake?

1. Giant sea wave caused by earthquakes on the ocean floor:  
a. Hurricane      b. Tsunami      c. Typhoon
2. The height of a wave from its crest or trough to its midpoint; measure of wave strength:  
a. Crest      b. Trough      c. Amplitude
3. The break in the rock where the movement that has caused the earthquake to occur:  
a. Ring of fire      b. fault      c. focus

## Aftershocks & Foreshocks

1. Little earthquakes following the initial one:  
a. Aftershocks      b. foreshocks      c. epicenter
2. Why are foreshocks less likely to do damage than aftershocks?  
a. They are larger in force      b. they are smaller in magnitude      c. they are weaker
3. What term refers to the energy release and ground shaking before an earthquake?  
a. Aftershock      b. foreshock c. shockwaves

## The Richter Scale: Measure of Earthquakes

1. The weakest earthquake measure is \_\_\_\_ on the Richter Scale.  
a. 0      b. 5      c. 1
2. Earthquakes that cause damage are greater than \_\_\_\_ on the Richter Scale.  
a. 8      b. 6.5      c. 5.5
3. Earthquakes that measure 10 on the Richter Scale are very:  
a. Gentle      b. common      c. rare

## Destruction Caused by Earthquakes: Match each word with it's correct meaning

1. Made of diagonal pieces connecting beams and columns	Shear Wall
2. A force that comes from the sides	Bracing
3. Stiff wall made of braced panels	Lateral force
4. Earthquakes are _____ to occur where faults are located	
a. Less likely      b. more likely	
5. Scientists are using new technology to _____ when an earthquake will be coming.	
a. Predict or detect      b. Stop	

## **ROCK DEFORMATION & MOUNTAIN BUILDING**

### Types of Rock Deformation

1. What is the study of Rock Deformation called?  
a. Fossil recording      b. Structural Geology      c. Geography
2. Rock Deformation is defined as:  
a. A process by which rocks are cleaned and broken down  
b. A process of changing/transformation of rocks due to stress and heat  
c. A process of collecting different shapes and sizes of rocks
3. Three types of Rock Deformation are Folds, Faults, and \_\_\_\_\_.  
a. Joints      b. creases      c. skin
4. Fractures in the crust along which appreciable displacement has occurred, on a scaled from cm~km.  
a. Joints      b. Faults      c. Folds

## Types of Geological Folds & Faults

1. According to the Continental Drift theory what happened for Pangea?
  - a. It broke up to form smaller continents
  - b. It merged with other continents to make a super continent
  - c. It fell apart and disintegrated into particles in the air
2. What is Earth's crust divided into?
  - a. Folds
  - b. Great blocks called tectonic plates
  - c. Continents
3. What are mid-ocean ridges?
  - a. Long rivers that are found along the fault lines
  - b. Long mountain ridges that are found on the abyssal plains
  - c. Coral reefs found at the bottom of the ocean

## Process of Mountain Building

1. Folds are classified by \_\_\_\_\_ of rock layers.
  - a. Age
  - b. Shape
  - c. Color
2. Oldest layer found at the core of the fold; often looks like layers that are arched downwards and high in the middle.
  - a. Syncline
  - b. Anticline
  - c. Faults
3. A force per unit area acting on a solid; can cause deformation
  - a. Reverse Fault
  - b. Tension
  - c. Shear Stress
4. A mountain formed when large blocks of crusts are tilted, uplifted, or dropped between large normal faults
  - a. Folded mountain
  - b. Fault-block mountain
  - c. Deformed mountain

## **UNDERSTANDING VOLCANOES**

### Volcano Types: Shield, Composite, and Cinder Cones

1. Broad base; gently sloping sides: _____	5. Resembles a warrior shield: _____
2. Steep sides; very small: _____	6. Magma is low in silica: _____
3. Tall and steep sided: _____	7. Has a bowl-shaped crater at the top: _____
4. Magma is high in gas: _____	8. Quiet and non-explosive eruptions: _____

### Stages of a Volcano: Match the stage with the correct meaning

Extinct	Has erupted in the last 10,000 years
Active	Has not erupted in 10,000 years and won't erupt again
Dormant	Has not erupted in 10,000 years and is likely to erupt again

## Volcanic Eruptions

1. How many layers does the earth have?
  - a. 4
  - b. 2
  - c. 3
2. When tectonic plates crash together, they cause \_\_\_\_\_
  - a. Tornadoes
  - b. Earthquakes
  - c. Floods
3. What is the 2<sup>nd</sup> layer of the Earth?
  - a. Core
  - b. Mantle
  - c. Crust
4. The core and mantle are extremely \_\_\_\_\_
  - a. Hot
  - b. Cold
  - c. Warm

## Fires from within the Earth: Magma vs Lava: Use the words below for each definition listed

Destruction	Fountain	Core	Liquid	Fissure
Bubble	Solid	Volcano	Eruption	Temperature

1. The measure of how hot or cold something is: \_\_\_\_\_
2. A mountain with a large hole at the top, through which lava (very hot liquid rock) is sometimes forced out: \_\_\_\_\_
3. A ball of air or gas in liquid: \_\_\_\_\_
4. An occasion when a volcano explodes, and flames and rocks come out of it; the act of doing this: \_\_\_\_\_
5. Hard or firm, with a fixed shape; not liquid or gas: \_\_\_\_\_
6. A substance that is not a solid or gas; for example: water or milk: \_\_\_\_\_
7. A deep crack, especially in rock or earth: \_\_\_\_\_
8. The hard central part of a fruit such as an apple; the most important part of something: \_\_\_\_\_
9. A structure from which water is pushed up into the air, used for example as decoration in a garden or a park: \_\_\_\_\_
10. The act or process of destroying something or of being destroyed: \_\_\_\_\_

## Gases Released During an Active Volcano

1. Carbon dioxide is \_\_\_\_\_ and \_\_\_\_\_.
  - a. Colorless and odorless
  - b. Stinky and deadly
  - c. Hot and airy
2. The most common gas is water vapor, or \_\_\_\_\_.
  - a. Rain
  - b. Steam
  - c. Acid rain
3. Volcanoes emit \_\_\_\_\_.
  - a. Oxygen
  - b. Nitrogen
  - c. Carbon dioxide
4. The molten rock that is stored beneath volcanoes is called:
  - a. Magma
  - b. Lava
  - c. Vog
5. A \_\_\_\_\_ compares light recorded outside the plume, to light recorded while flying under the plume.
  - a. Thermometer
  - b. Spectrometer
  - c. Telemeter

## Life of a Volcano

1. What are the 3 stages of a volcano?
  - a. Active, inactive, extinct
  - b. Active, Dormant, extinct
  - c. Active, Closed, full
2. A(n) \_\_\_\_\_ volcano (also called dead volcano) is very unlikely to ever erupt again.
  - a. Active
  - b. Dormant
  - c. Extinct
3. A \_\_\_\_\_ volcano is a sleeping volcano
  - a. Active
  - b. Dormant
  - c. Extinct
4. A(n) \_\_\_\_\_ is either currently erupting or may erupt in the future.
  - a. Active
  - b. Dormant
  - c. Extinct