

**THE STUDY GUIDE FOR THE 1ST END-TERM TEST****PART I. SCIENCE VOCABULARY & KNOWLEDGE REVIEW**

Topic	Science vocabulary	Science knowledge
Landslides Change Earth's Surface	<i>gravity, landslide, loosen, bare, loose, rapid</i>	<ul style="list-style-type: none">❖ Earth's gravity is a force that pulls things toward the center of Earth.❖ A landslide is a rapid movement of rock, soil, and other material down a hill or mountain.❖ Gravity pulls the rocks and other loosened material downhill and cause landslides.<ul style="list-style-type: none">• Heavy rains can loosen soil and rock on slopes.• Volcanoes and earthquakes can also start the motion.
Natural Hazards	<i>buckle, collapse, spew, constantly, disrupt, beneath</i>	<ul style="list-style-type: none">❖ A hazard is something that is harmful or dangerous.❖ Earthquakes, tsunamis, and volcanoes are three natural processes that can be hazardous to humans.<ul style="list-style-type: none">• Earthquakes can cause buildings to collapse and roads and bridges to buckle. They may also break power lines and water pipes.• When large tsunamis come ashore, they can destroy buildings, roads, or even entire villages.• Volcanic eruptions can spew hot ash and molten rock which can bury buildings and roads and damage crops.
Earthquakes	<i>twist, shake, quake, slab, fault, boundary</i>	<ul style="list-style-type: none">❖ An earthquake is the shaking of Earth's surface that caused by the movement of slabs of rock along a fault.❖ A fault is a break in Earth's surface where huge slabs of rock come together.❖ When locked slabs break free, energy is released and moves through the rocks. This makes the ground shake.❖ Strong earthquakes can be very harmful and dangerous. Powerful earthquakes can damage buildings and other structures.

Tsunamis	<i>smash, approach, shore, ashore, turbulent, crash, sweep, slump, seawall</i>	<ul style="list-style-type: none"> ❖ A tsunami is a series of fast-moving ocean waves caused by an earthquake, or an underwater volcanic eruption, or a landslide. ❖ As the waves approach shore, the waves move slower but constantly increase in height. ❖ When a large tsunami smashes into land, its turbulent water can destroy houses, roads, and other structures. People may be swept away.
Volcanoes	<i>ash, erupt, expand, bury, explode, explosive</i>	<ul style="list-style-type: none"> ❖ A volcano is an opening on the Earth's surface that allows material, magma, escape from the inside. ❖ Lava is magma that erupts onto Earth's surface. Hot ash and gases are released during an eruption. ❖ Hot ash and lava released during an eruption may quickly bury or destroy nearby forests, fields, and towns. The ash in the air makes it difficult to breathe.
Reducing the Impact of Natural Hazards	<i>eliminate, reduce, withstand, suspend, suspension bridge, detect</i>	<ul style="list-style-type: none"> ❖ Natural hazards cannot be eliminated, but people can take steps to reduce their impact. ❖ Suspension bridges are designed to withstand major earthquakes. <ul style="list-style-type: none"> • The main tower has four pieces that move separately. • Cables are very strong and support the weight of the bridge. • The bridge also contains a motion-detection system.
Early Warning System	<i>monitor, evacuate, tilt, seismic, seismograph, seismometer</i>	<ul style="list-style-type: none"> ❖ Scientists use many devices and methods to help predict when natural hazards are likely to happen such as seismometer, tiltmeter, monitoring system, ... ❖ If people know that a natural hazard is likely to occur, they can take steps to reduce its impact and save lives. <ul style="list-style-type: none"> • People can evacuate, or move to safer areas. • Emergency workers can be ready to help with injuries or find lost people. • Governments can prepare emergency supplies, such as shelter, food and water.
Tsunami Detection	<i>buoy, continent, indicate, encircle, moor, transmit</i>	<ul style="list-style-type: none"> ❖ Most of the events that cause tsunamis occur on the floor of the ocean. But it is not easy to collect seismic activity data there. ❖ Scientists use DART system (Deep-ocean Assessment and Reporting of Tsunamis) to monitor the changes in depth of the ocean water. ❖ If scientists alert an approaching tsunami. People can then leave areas near the coast and move inland or to higher ground.

External Structures of a Wild Rose	<i>external, petal, pollen, reproduce, attract, scent, function</i>	<p>❖ The flower allows the wild rose to reproduce. Flowers produce seeds, which can grow into new plants.</p> <p>❖ Other external parts of a wild rose have important functions in the growth and survival of the plant:</p> <ul style="list-style-type: none"> • Stems support the leaves and flowers. • Leaves make food for the plant. • Sharp thorns protect the plant from hungry animals. • Roots take in water and dissolved mineral nutrients from the soil.
Internal Structures of a Wild Rose	<i>internal, stamen, pistil, develop, bundle, carry, opening, vein, magnifying glass, microscope, layer</i>	<p>❖ In the center of the flower are the stamens and pistil. Stamens make pollen which must be transferred to the pistil. Then the pistil develops into a fruit with seeds inside</p> <p>❖ Inside each stem are bundles of tiny tubes which carry water or food in the plant.</p> <p>❖ Tiny hairs on the roots take in water and mineral nutrients from the soil.</p> <p>❖ Leaves are made up of several parts: the outer layer, food-making layer, openings in the bottom and veins.</p>

PART II. PRACTICE

Task 1. Circle the correct answers.

1. What can people do if they hear a tsunami alerting sound?

- A. Surf the waves
B. Run inland to higher ground
C. Watch the waves
D. Prepare swimming suit

2. Which of these natural events can occur due to a tsunami?

- A. Flood
B. Earthquake
C. Hurricane
D. Volcanic eruption

3. What is a landslide?

- A. A landslide is a rapid movement of rock, soil, and other material down a hill or mountain.
- B. A landslide is a rapid movement of rock, soil, and other material up a hill or mountain.
- C. A landslide is a slow movement of rock, soil, and other material down a hill or mountain.
- D. A landslide is a slow movement of rock, soil, and other material up a hill or mountain.



4. Who works as an emergency worker that will help people during a hazard?

- A. A fireman
- B. A bus driver
- C. An engineer
- D. A security guard

5. What do scientists use a seismometer to do?

- A. Monitor water level
- B. Eliminate ground motion
- C. Detect seismic activity
- D. Measure temperature changes in rocks



6. What does Mercalli scale describe?

- A. The effects caused by earthquakes.
- B. The energy released by earthquakes.
- C. The number of people dead by earthquakes.
- D. The total property lost by earthquakes.

7. What causes earthquakes?

- A. The change of course of rivers.
- B. The movement of slabs of rock along a fault.
- C. The mining activity of humans.
- D. The farming activity of humans.

8. What is called a hazard?

- A. Something that is beautiful or delicious.
- B. Something that is harmful or dangerous.
- C. Something that is meaningful or serious.
- D. Something that is powerful or obvious.

9. What is inside a volcano?

- A. Coal
- B. Burnt wood
- C. Magma
- D. Lava

10. What do we notice to know that a volcano erupts nearby so we can run away?

- A. The magma in the volcano.
- B. The color of the clouds.
- C. The lava on the ground.
- D. The ash in the sky.



Task 2: Choose whether which of these statements are True or False.

True	False	1) Earthquakes, tsunamis, and volcanoes are three events that caused by humans but also can be hazardous to humans.
True	False	2) Sediment is material that comes from the deposition of rock.
True	False	3) In places where the ocean is deep, tsunami waves may be only a few centimeters high.
True	False	4) Volcanoes may also release poisonous gases.
True	False	5) No tsunami can crash over seawalls.
True	False	6) Volcanic ash in the air can disrupt airline traffic.
True	False	7) An increase in small earthquakes can mean a volcano is becoming less active.
True	False	8) Engineers can design buildings and bridges to eliminate the violent shaking of earthquakes.

Task 3: Choose the words in the bank below to fill in the blank.

a) In a flower, pollen can be _____ (1) from a stamen to the pistil. The pistil can _____ (2) into a fruit with seeds inside. Each seed can grow into a _____ (3) plant.

b) The outer layer of a leaf protects it and keeps it from _____ (4) out. Food is made in the middle _____ (5) . Air enters the leaf through _____ (6) in the bottom of the leaf. In veins, some tiny tubes _____ (7) water to the leaf. Other tubes carry _____ (8) from the leaves to the rest of the plant.

c) Inside each stem, bundles of tiny tubes carry food and _____ (9) to other parts of the plant. Roots have tiny _____ (10) to take in water and nutrients from the soil.

water

develop

hairs

new

transferred

layer

drying

openings

food

carry

Task 4. Write each word below under the picture to that it is related.

Buoy

Monitor

Seismometer

Tiltmeter

Evacuate

Suspend

Pistil

Stamen



1. _____



2. _____



3. _____



4. _____



5. _____



6. _____



7. _____



8. _____

Task 5. Circle the correct answers.

1. In which external structure does most food production take place?

- A. The flower.
- B. The leaf.
- C. The stem.
- D. The root.

2. How many petals do these three wild roses have in total?

- A. Three petals.
- B. Five petals.
- C. Ten petals.
- D. Fifteen petals.



3. Why do flowers have colorful petals and scent?

- A. To attract insects.
- B. To kill insects.
- C. To protect from insects.
- D. To make food for insects.

4. What part of a flower makes pollen?

- A. Petals.
- B. Stamens.
- C. Stem.
- D. Pistil.

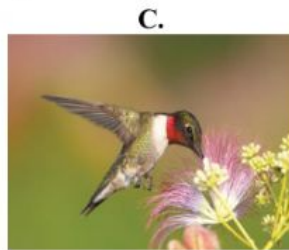
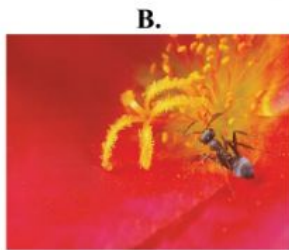
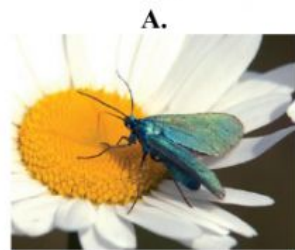
5. Anna got a potted plant for her birthday. As she looked at the plant, Anna noticed that it did not have flowers.

How will this affect the plant?

- A. It will not be able to make food.
- B. It will not be able to take in water.
- C. It will not be able to produce seeds.
- D. It will not be able to carry water through its stems.



6. Choose the picture which shows a wild rose attracting insects.



7. Which external structure of this wild rose protects the plant from hungry animals?

- A. The stem.
- B. The thorn.
- C. The leaf.
- D. The root.

8. Which external structure of this wild rose makes seeds for reproduction?

- A. The flower.
- B. The stem.
- C. The leaf.
- D. The root.



9. Why do the stems of these plants have to bend toward the window?

- A. To get more water.
- B. To get more air.
- C. To get more sunlight.
- D. To get more food.



10. What parts of the wild rose develop into these hips?

- A. The stems.
- B. The roots.
- C. The leaves.
- D. The thorns.

