

Weekly Test No. 3

Directions: Read each scenario carefully. Write the letter and word of your answer.

SCENARIO 1

During Science Week, Grade 6 students performed an activity to learn more about the air around them. They prepared three containers:

Container A is sealed and has a small insect inside. After some time, the students observed that the insect became weak when the air inside the container changed.

Container B had small holes and had a green plant placed near sunlight. The students observed that the plant continued to grow because it used gas from the air to make food.

Container C was tested by the students to identify the gases present in the air. Their teacher explained that air is a mixture of different gases, and each gas has a different role.

After the activity, the students recorded their observations and discussed the importance of the gases found in air.

1. Based on the investigation, which gas in the air is needed by the animal in Container A to stay alive??

- A. Oxygen B. Carbon Dioxide C. Nitrogen D. Helium

2. The students learned that the plant in Container B uses a gas from the air to make its own food. Which gas was the plant using?

- A. Oxygen B. Nitrogen C. Carbon dioxide D. Water vapor

3. The teacher explained that one gas makes up the largest part of the air tested in Container C. Which gas is most abundant in air?

- A. Oxygen B. Nitrogen C. Carbon dioxide D. Water vapor

4. After comparing their observations from all three containers, the students wrote a conclusion about air. Which conclusion is supported by their investigation?

- A. Air contains only oxygen because living things need it.
B. Air is made of different gases that have different roles.
C. Air contains only carbon dioxide because plants need it.
D. Air does not contain gases because it cannot be seen.

5. One student said, "Since oxygen is important for animals and carbon dioxide is important for plants, these must be the only gases in air." How should the students respond based on their teacher's explanation?

- A. Agree, because only gases used by living things are found in air.
B. Agree, because air contains only two gases.
C. Disagree, because air contains different gases.
D. Disagree, because air does not contain any gases.

SCENARIO 2

One weekend, Ana helped her grandmother prepare lunch and drinks at home. While cooking soup, she noticed that the salt disappeared after stirring but the soup still tasted salty. Afterward, Ana prepared powdered juice, and the powder also dissolved completely, making the drink evenly colored.

Later that day, Ana helped in the garden. She mixed soil with water to make a mixture for planting. After a few minutes, she noticed that the soil particles settled at the bottom while the water became clearer.

6. Why did Ana no longer see the salt after stirring it into the soup?

- A. The salt was destroyed. C. The salt turned into water.
B. The salt dissolved in water D. The salt settled at the bottom.

7. What type of mixture was formed when Ana mixed soil and water?

- A. Solution B. Suspension C. Pure substance D. Gas mixture

8. Why did the soil particles settle at the bottom of the container?

- A. The soil dissolved completely in the water. C. The soil vanished completely after mixing.
B. The soil particles stayed separated in the water. D. The soil turned into liquid after mixing.

9. Which mixture from Ana's experience is an example of a solution?

- A. Soil and water B. Muddy water C. Powdered juice and water D. Sand and water

10. Why is it important to understand solutions and suspensions?

- A. It helps us understand how mixtures behave and work.
- B. It shows that all mixtures dissolve in water easily.
- C. It proves that mixtures cannot be separated anymore.
- D. It explains that only liquids can form mixtures.

SCENARIO 3

On Saturday morning, Lea helped her mother with different chores at home. First, she stirred sugar into a glass of warm calamansi juice until the sugar could no longer be seen. The drink looked the same from top to bottom.

Later, while cleaning the backyard, Lea accidentally mixed soil with a bucket of water. At first, the mixture looked cloudy. After a few minutes, she noticed that the soil settled at the bottom while the water became clearer.

In the afternoon, her younger brother had a cough, so their mother shook a bottle of cough syrup before pouring it into a spoon. She explained that the medicine had to be shaken because some tiny particles settle at the bottom when left standing.

Lea realized that although all of these are mixtures, they do not behave in the same way.

11. Which mixture in the story is an example of a uniform mixture (solution)?

- A. Soil mixed with water
- B. Sugar dissolved in calamansi juice
- C. Cough syrup before shaking
- D. Soil settled at the bottom of the bucket

12. Why did the soil settle at the bottom of the bucket after a few minutes?

- A. The soil dissolved completely in the water.
- B. The soil particles remained undissolved.
- C. The water changed the soil into another substance.
- D. The soil disappeared after mixing.

13. Lea's mother shook the cough syrup before using it. What does this suggest about the cough syrup?

- A. It is a suspension because some particles settle when left standing.
- B. It is a solution because all particles stay evenly mixed all the time.
- C. It is a pure substance with no mixture.
- D. It is made only of water.

14. Which statement best compares the sugar drink and the soil-water mixture?

- A. Both are uniform mixtures because they contain water.
- B. Both are suspensions because they can be stirred.
- C. The sugar drink is a uniform mixture, while the soil-water mixture is a non-uniform mixture.
- D. The soil-water mixture is uniform, while the sugar drink is non-uniform.

15. Based on Lea's observations, why is it important to know whether a mixture is uniform or non-uniform?

- A. It helps people use different mixtures properly in daily life.
- B. It shows people that all mixtures dissolve completely when mixed with water.
- C. It proves that non-uniform mixtures are not useful for any purpose in life.
- D. It explains that only liquid substances can combine and form mixtures.

SCENARIO 4

One morning, Marco joined his family on a trip to a nearby mountain. While walking along the trail, he noticed that he could not see the air around him, but he could feel the cool breeze touching his skin. His mother explained that air is important because living things need it to survive.

As they continued their hiking, Marco observed different examples of how gases in the air help living things. The trees around them used gas from the air to make their own food, while Marco and the animals nearby used another gas for breathing. His father also explained that nitrogen makes up the largest part of air and that water vapor in the air helps form clouds and rain.

16. Based on the story, why was Marco able to feel the breeze even though he could not see the air?

- A. Air is made of gases.
- B. Air does not contain any matter.
- C. Air is only made of water vapor.
- D. Air can only be seen during storms.

17. Which gas in the air did Marco and the animals use for breathing?

- A. Oxygen
- B. Carbon Dioxide
- C. Nitrogen
- D. Helium

- 18.** The trees in the mountain used a gas from the air to make their own food. Which gas was this?
A. Oxygen B. Carbon Dioxide C. Nitrogen D. Helium
- 19.** Marco's father said that one gas makes up the largest part of air. Which gas is he referring to?
A. Oxygen B. Carbon Dioxide C. Nitrogen D. Helium
- 20.** During the trip, Marco noticed clouds forming in the sky. Which component of air helps in the formation of clouds?
A. Oxygen B. Carbon Dioxide C. Nitrogen D. Helium
- 21.** Why is it important to understand that air is a mixture of different gases?
A. It helps people understand how gases support life.
B. It proves that only oxygen supports life and the environment.
C. It shows that air never changes in any situation.
D. It explains that air has no connection to living things
- 22.** Why can air be considered a mixture?
A. It contains different gases.
B. It contains only one type of gas.
C. It cannot be touched or seen.
D. It has no important role in nature.
- 23.** A student says, "Air is only oxygen because humans need oxygen to survive." Which response best corrects the student's idea?
A. Air is only carbon dioxide because plants need it.
B. Air is made of different gases.
C. Air contains no gases because it cannot be seen.
D. Air is only water vapor because it forms clouds.
- 24.** If the amount of carbon dioxide in the air decreased greatly, which living thing would be affected most directly?
A. Plants that use carbon dioxide to make food
B. Animals that need nitrogen to breathe
C. Clouds that need oxygen to form
D. Humans that only use water vapor
- 25.** Marco created a diagram showing the parts of air. Which group should he include?
A. Oxygen, carbon dioxide, nitrogen, and other gases
B. Sugar, salt, oxygen, helium, argon, and other gases
C. Soil, rocks, carbon dioxide, minerals, and other gases
D. Hydrogen, sugar, salt, and other gases