

Grade 4 Science Worksheet 1: Composition and Properties of Air (Difficulty Level: Advanced)

Name: _____

Date: _____

Question 1: Why is nitrogen important in the air even though humans and animals do not breathe it directly?

- a) It helps regulate body temperature.
 - b) It is converted by plants into nutrients for growth.
 - c) It keeps the oxygen level constant.
 - d) It helps create clouds.
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Question 2: How does carbon dioxide in the air contribute to climate change?

- a) It absorbs heat and traps it in the atmosphere.
 - b) It cools the Earth's surface.
 - c) It reduces the amount of water vapor in the air.
 - d) It speeds up the movement of air particles.
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Question 3: Why is oxygen in the air necessary for combustion?

- a) It provides the heat required for burning.
 - b) It reacts with fuel to release energy.
 - c) It keeps the fire from spreading.
 - d) It blocks other gases from reacting.
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Question 4: What percentage of air is made up of gases other than nitrogen and oxygen?

- a) About 1%
- b) About 10%

- c) About 5%
 - d) About 25%
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Question 5: How does the air pressure change when the temperature of the air increases?

- a) Air pressure increases because particles move faster and push outward.
 - b) Air pressure decreases because particles move slower.
 - c) Air pressure stays the same.
 - d) Air pressure disappears.
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Bonus Question:

Which gas in the air is the heaviest and found in small amounts?

- a) Argon
 - b) Carbon dioxide
 - c) Oxygen
 - d) Nitrogen
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