

NAME: _____ DATE: _____

DIRECTIONS

Read the text and then answer the questions.

What do you have in common with a pencil, a star, and a bird? The answer is *matter*. Everything in the universe, including the planets, is made of matter. The cereal you eat for breakfast is made of matter, and so is the juice you drink. Soil, baseballs, and jeans are made of matter, too. All matter is made of *atoms*. Atoms are very small—they are so small that you can't see them, even with a microscope. Scientists use a special powerful microscope to see atoms. Since you are made of matter, you are also made of atoms. There are many millions of atoms in your body. You can't see them when you look in the mirror, but they are there.

SCORE

1. (Y) (N)

2. (Y) (N)

3. (Y) (N)

4. (Y) (N)

5. (Y) (N)

___ / 5

Total

1. What is the main idea of this paragraph?

- (A) Cereal is made of matter.
- (B) Everything is made of matter.
- (C) Atoms are very small.
- (D) Matter is very small.

2. Which statement is true about atoms?

- (A) Atoms are very large.
- (B) Only people are made of atoms.
- (C) It is easy to see atoms.
- (D) Atoms are extremely small.

3. Which definition of *matter* is used in this text?

- (A) something to be proven
- (B) a problem
- (C) the subject of a speech or text
- (D) a substance made of atoms

4. What do scientists use to see atoms?

- (A) a microscope
- (B) matter
- (C) a mirror
- (D) millions

5. Which word describes the tone of this text?

- (A) informative
- (B) persuasive
- (C) funny
- (D) serious

NAME: _____ DATE: _____

DIRECTIONS

Read the text and then answer the questions.

Atoms are very small. But they are made of parts that are even smaller. Most of the inside of an atom is empty space. But each atom has a center called a *nucleus* (NOO-klee-uhs). The nucleus is made of protons and neutrons. Atoms also have electrons that circle the nucleus. Everything in the universe is made of atoms. So, if a piece of wood and a rock are both made of atoms, why do they look different? There are many different kinds of atoms, and each kind has a different number of protons, neutrons, and electrons. Here is an example. Each atom of oxygen has eight protons, eight neutrons, and eight electrons. Helium is a little different. Each atom of helium has two protons, two electrons, and one or two neutrons. Wood and rocks are made of different kinds of atoms, so they look different.

SCORE

1. (Y) (N)

2. (Y) (N)

3. (Y) (N)

4. (Y) (N)

5. (Y) (N)

___ / 5
Total**1.** What is this text mostly about?

- (A) neutrons
(B) protons
(C) atoms
(D) oxygen

2. Why do wood and rocks look different from each other?

- (A) They are not made of atoms.
(B) They are made of different kinds of atoms.
(C) Wood is made of atoms. Rocks are not.
(D) Rocks are made of atoms. Wood is not.

3. Which word has the root word *atom*?

- (A) Tom
(B) atomic
(C) tomb
(D) atrocious

4. What is a *nucleus*?

- (A) the center of a atom
(B) made of electrons
(C) bigger than an atom
(D) made of wood

5. How does the reader know the language is informative in this text?

- (A) The author is serious.
(B) The author makes jokes.
(C) The author includes only facts.
(D) The author writes a letter.

NAME: _____ DATE: _____

DIRECTIONS

Read the text and then answer the questions.

Everything, no matter what it looks like, is made of matter. Matter can exist in one of several *phases*, or states. Some matter exists as a solid. Solid matter holds its shape. For example, a chair is made of solid matter. In solid matter, the atoms are very tightly connected and do not move around much, so solid matter holds its shape. Liquid matter is a little different. Water and juice are examples of liquid matter. The atoms in liquid matter are not as tightly connected so they move more. The shape of liquid matter depends on its container. That is why the shape of water changes when you pour it. Gas is another state of matter. Oxygen is a gas, and so is helium. Gases do not hold their shape because the atoms in gases are very loosely connected. So gases expand to fill their containers.

SCORE

1. (Y) (N)

2. (Y) (N)

3. (Y) (N)

4. (Y) (N)

5. (Y) (N)

___ / 5

Total

1. Which phase of matter holds its shape?

- (A) water
- (B) gas
- (C) liquid
- (D) solid

2. Which phase of matter has atoms that are very loosely connected?

- (A) solid
- (B) gas
- (C) a chair
- (D) liquid

3. Which is **not** a phase of matter?

- (A) atom
- (B) liquid
- (C) solid
- (D) gas

4. Which is the antonym of *loosely*?

- (A) solid
- (B) tightly
- (C) easily
- (D) slowly

5. Which phrase indicates a sample of something?

- (A) *that is why*
- (B) *for example*
- (C) *no matter what it looks like*
- (D) *is a little different*

NAME: _____ DATE: _____

WHAT'S THE MATTER?

Everything in the universe is made of matter. Matter cannot be created or destroyed, but it can change its form. Some changes in matter are physical changes. That means that matter changes its shape or appearance, but it is still the same kind of matter. It doesn't become a different kind of matter. For example, imagine that you take a piece of ice out of the freezer and put it into a cup. What happens to the ice if you leave it out of the freezer? It melts and turns into liquid water. It is still the same matter, but it has changed from a solid into a liquid. When you warm up the ice, you are not destroying it; you are just changing its form. And if you put that water back in the freezer, it will freeze again and change its form from a liquid to a solid.



Now, imagine that you put water into a pan and put it on a stove. If you heat the water long enough, what happens to it? Have you ever seen steam rising from boiling water? That steam is actually water that has turned into a gas and evaporated. The water you put on the stove has not been destroyed. It has just changed its form from a liquid to a gas. If you put a cover on the pan for a short while and then take the cover off, you'll see drops of water on the cover. Those drops of water are gas that has changed back into liquid water.

Other kinds of changes in matter are chemical changes. Chemical changes are different from physical changes. In chemical changes, matter doesn't just change its form. It becomes something different. For instance, let's say that you bake cookies. To make cookies, you use eggs, flour, sugar and other things. Then, you mix everything up and bake your cookies. You have not destroyed the things you used for your cookies. Those things are in the cookies. But you have changed the flour, eggs and other things into something different. Your cookies do not look like flour or eggs. And you cannot turn cookies back into flour and eggs. You cannot create or destroy matter, but you can make it change its form.

NAME: _____ DATE: _____

DIRECTIONS

Read "What's the Matter?" and then answer the questions.

1. Which is a topic sentence?

- (A) What happens to the ice if you leave it out of the freezer?
- (B) Other kinds of changes in matter are chemical changes.
- (C) It has just changed its form from a liquid to a gas.
- (D) Your cookies do not look like flour or eggs.

2. Which is true about physical changes?

- (A) They do not happen to matter.
- (B) They do not change the shape of matter.
- (C) They do not happen to solids.
- (D) They do not change one kind of matter into another kind.

3. Which question reflects a purpose for reading this text?

- (A) Is this about someone making a mistake?
- (B) How does this explain matter?
- (C) Is this about someone's problem?
- (D) How does this explain dangerous chemical reactions?

4. What does this text compare?

- (A) matter and atoms
- (B) ice and water
- (C) flour and eggs
- (D) physical and chemical changes

5. What does the author want the reader to learn?

- (A) how to drink a lot of ice water
- (B) how to bake a lot of cookies
- (C) the difference between physical and chemical changes
- (D) how to write a book of recipes

6. What is baking a pie an example of?

- (A) something freezing
- (B) matter that does not change
- (C) a chemical change
- (D) a physical change

7. What is the main topic of this text?

- (A) changes in matter
- (B) solids and liquids
- (C) water
- (D) chemicals

8. Which summary of the text is the most accurate?

- (A) This text explains about matter changing in different ways.
- (B) This text describes how ice melts in our oceans.
- (C) This text gives a recipe for baking things.
- (D) This text describes the life of a famous chemist.

SCORE

1. (Y) (N)

2. (Y) (N)

3. (Y) (N)

4. (Y) (N)

5. (Y) (N)

6. (Y) (N)

7. (Y) (N)

8. (Y) (N)

___ / 8

Total

