

Is a Solid as Solid as a Rock?

By Erin Horner

Matter is everywhere! Matter is anything that takes up space and has mass, or weight. A solid is one kind of matter. Solid matter has its own shape. If it is placed in a container, a solid's shape does not usually change. A book is a solid. If you were to put a book in a bowl, it would still look like a book. If you were to put a book in the bathtub, it might get wet, but it would still look like a book! Some solids are hard. A baseball bat is a hard solid. Some solids are soft. A teddy bear is a soft solid. Some solids are thin. A piece of paper is a thin solid. Some types of matter are solids, but not all solids are as solid as a rock!



Is a Solid as Solid as a Rock?

Questions

1. What is matter?

2. The author probably wrote this article to _____.

- A. Demonstrate how matter becomes solid
- B. Describe how solids melt
- C. Inform you about solid matter
- D. Persuade you to study solids

3. Which of the following is true about solids?

- A. All solids are soft.
- B. Rocks are solids.
- C. Water is a solid.
- D. All solids are hard.

Go With The Flow: Liquids

By Erin Horner

Did you know liquid is matter? Actually, matter is all around us. Matter is anything that takes up space and has mass (or weight). There are three types of matter commonly found on Earth. A liquid is one type. A liquid does not have its own shape. It takes the shape of its container. It flows easily.

Milk is a liquid. In a carton, milk takes the shape of the carton. In a cup, milk takes the shape of the cup. When spilled on the floor it takes a new shape-- the shape of a puddle!

Liquids do not always stay liquid. Water is a liquid. If you heat it, it will turn into steam. Steam is a gas. If you freeze water, it will become ice. Ice is a solid. Liquids are an "in between" type of matter. They are the state in-between a solid and a gas.

Liquids change when they are heated or cooled. Liquids can change shape and change states. I guess flowing liquids really do "go with the flow."



Go With The Flow: Liquids

Questions

1. Where is matter?

_____ 2. The author probably wrote this article to _____.

- A. Demonstrate how liquids become solids
- B. Describe how solids become gasses
- C. Persuade you to drink more liquids
- D. Inform you about the liquid state of matter

Gasses

By Erin Horner

Did you know that you are made of matter? It's true. Matter is all around us. Matter is anything that takes up space and has mass, or weight. Your body contains and creates three states of matter. Your arms and legs are examples of solids. They have their own shape. Your blood is an example of a liquid. As it flows through your body it takes the shape of your blood vessels. The air that you inhale is a gas. The carbon dioxide that you exhale is one, too. Gasses are the third state of matter.



It is easy to see a solid. It is easy to see a liquid. It is not always easy, though, to see a gas. A gas does not have its own shape. But it can take on the shape of different containers. If you blow up a round balloon, the air (a gas) will move around and fill it up. If you were to blow up a long and skinny balloon the same thing would happen. This time, though, the air would take on a new shape. It would be long and thin rather than big and round.

Many gasses are invisible. They cannot be seen until they start to change states. When water boils, it becomes a gas called water vapor. When water vapor cools it turns into water. As gasses in the atmosphere cool, they change too. They become clouds.

Matter is all around us. Some, like solids and liquids, are easy to see. Gasses, on the other hand, are hard to see. But they're still matter. And they matter, too! Just like you!

Gasses

Questions

1. What is the name of gas that you exhale?

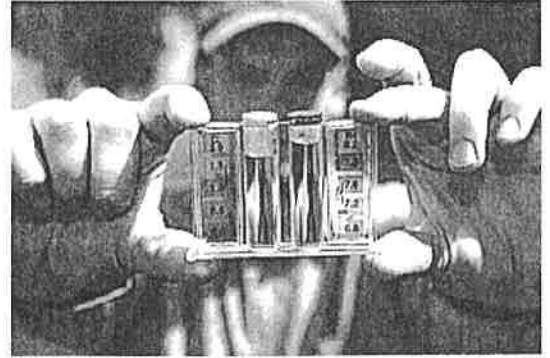
Chemistry by the Numbers: Acids and Bases

By Cindy Grigg

Rewritten as a short reader by Cindy Grigg

Why do lemons taste sour? Why does soap feel slick? These things happen because of two kinds of chemicals called acids and bases.

Acids are sour chemicals. Some are found in your kitchen. Almost everything that tastes sour has acid in it. Lime and lemon juice are acids. So are grapes, green apples, and sour milk. Grapefruit and many other foods have acids.



Everyone has stomach acid. This acid helps us digest our food. Some acids are used to flavor foods. Acids also help turn milk into cheese. They turn cucumbers into pickles. Many vitamins are acids that our bodies need to grow. Vitamin C is an acid. It helps our bodies fight colds and heal wounds. Without enough Vitamin C, people can get a disease called scurvy.

Bases are bitter chemicals. They are often found in our homes, too. Most bases should not be tasted. Few of them are foods. Many are poisons. Bases have a soapy, slick feel on the skin. Egg whites and ammonia are bases. Milk of magnesia and many drugs and medicines are bases, too. Drain and oven cleaners are very strong bases. They can damage our skin if we touch them. When bases are cooked with fats or oils, they turn into soap.

Water is neither an acid nor a base. It is called a neutral substance. We measure the power of acids and bases with the pH scale. Water is a 7 on the pH scale. Acids have lower numbers than 7. The stronger the acid, the lower its number.

Bases have higher numbers than 7. The higher the number, the more basic the substance is. To find out if something is an acid or a base, we use a pH test strip. This special paper has a chemical on it. You dip the paper into the liquid you want to test. The paper will change color to show if it is an acid or a base. You may have seen pool water being tested with a pH strip. If the strip turns a darker color, the liquid is an acid. If the strip turns a lighter color, then it is a base. You compare the strip to a color chart to find out the pH of the liquid you tested.

Name _____
Friday, March 13



Date _____

_____ 8. A number lower than 7 on the pH scale is _____.

- A. A base
- B. An acid

Name _____
Monday, March 16



Date _____

What Is Air?

Questions

1. What is air?

2. What is atmosphere?

_____ 3. Which of these things is true about air?

- A. Air takes up space and has weight.
- B. We must have air to stay alive.
- C. Moving air causes weather.
- D. all of the above

_____ 4. Which kind of gas in our air do we need to stay alive?

- A. nitrogen
- B. oxygen
- C. all of the above

_____ 5. Every tiny little _____ in your body needs air.

- A. hair
- B. blood vessel
- C. cell

Where Do Seeds Come From?

By Cindy Grigg

Plants make seeds. If a plant makes flowers or fruit, it also makes seeds. In the spring, plants grow. In summer, plants make seeds.

Seeds are very useful to people. Seeds make new plants. People get many foods from plants. People plant seeds in their gardens. New plants grow from the seeds. People eat many kinds of seeds. Beans and corn are two kinds of seeds that we eat.

Popcorn is a seed, too. When popcorn is heated, it explodes! Wheat and rice are seeds that people use to make breads and cereals. Coffee seeds (called coffee beans) are used to make coffee, a drink that many people enjoy.

People also use seeds to feed to animals. Cow feed has wheat seeds in it. Sunflower seeds make a good snack for people and for birds.

Even giant trees grow from tiny seeds. People use trees for wood to build homes. We use wood to make paper and many other things. Without seeds, new trees wouldn't grow. Tree nuts are really seeds. People and animals eat nuts. Squirrels eat seeds from oak trees. We call oak tree seeds acorns.

Seeds can be as big as your head (coconuts). Seeds can be as small as a grain of sand (lettuce). People plant seeds to grow food. Seeds need sunlight and water so they can grow. New plants grow and make more seeds.



Where Do Seeds Come From?

Questions

_____ 1. Seeds are _____ people.

- A. useless to
- B. useful to
- C. bad for

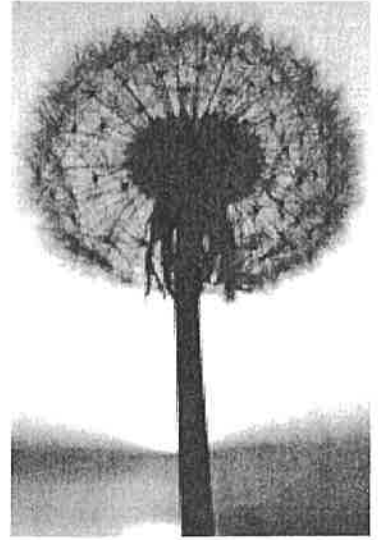
_____ 2. Where do seeds come from?

- A. Seeds come from plants.
- B. Seeds come from sunlight.
- C. Seeds come from animals.

Up, Up, and Away!

By Colleen Messina

I am called a weed, but some people think I am pretty anyway. My bright flowers spread across green lawns like yellow polka dots. I have roots that reach deep down into the ground. Some people do not like me to grow in their grass, so they pull me. Some people like to eat my leaves. They add me to salads. Part of my name is the same as a big African cat. I grow quickly, but after a short time, I become an "air head." My yellow flowers turn into fluffy white balls. Poof! The fluff goes up, up, and away. It is carried by a gentle breeze that takes my seeds to new places. See you next year!



Up, Up, and Away!

Questions

- _____ 1. The yellow flowers of this plant spread across a lawn and look like which of the following?
- A. polka dots
 - B. beads
 - C. berries
 - D. none of the above
- _____ 2. Where is one place this plant grows, according to this passage?
- A. mountains
 - B. deserts
 - C. rainforests
 - D. lawns
- _____ 3. These plants are known as weeds.
- A. false
 - B. true
4. What type of plant is described in this passage?
