

Matter

By

Edison Third Grade Teachers

Jamie Giraud

Nadia Jaser

Sharon Larson

Lupe Lastra-Short

Pat Kline

Adapted by Linda Palomino

The important thing about matter is that it has three forms: solid, liquid, and gas. It is made up of tiny particles called atoms.

But, the most important thing about matter is that it has three forms: solid, liquid, and gas. It is made up of tiny particles called atoms.

Matter is anything that takes up space. People, plants, and animals all take up space. Water, juice, and milk take up space too. Even steam, air, and helium take up space.

Matter is composed of elements. There are 112 elements represented on the periodic table. All elements are made up of small particles called atoms. Atoms are too small to see with your eyes. The atoms that make up one element are all alike.

Solids are one form of matter. A solid has a definite shape and volume. It stays the same no matter where it is. The shape of a pencil stays the same whether it is on a table, in your hand, or in a cup. Tables, people, ice cubes, and bananas are all solids. Can you think of any others?

Liquids are one form of matter. Liquids have a definite volume, but not a definite shape. Liquids take the shape of their containers. All liquids flow. Some flow faster and some flow slower. Some examples are water, oil, lemonade, and vinegar. Can you think of anymore?

Gases are one form of matter. A gas has no definite shape or volume. Gases expand to fill their container. Often you can feel gases, but you usually can't see them. Most gases are colorless. Water vapor, oxygen, helium, propane, and carbon dioxide are all gases. Can you think of other examples of gases?

Matter can also change from one form to another. When matter changes form, the particles stay the same, but they are either closer together or are farther apart. Sometimes matter changes from one form to a different form when energy is added to heat the matter or energy is removed to cool it.

Matter can be combined into mixtures. There are different kinds of mixtures. Mixtures can be made of solids, liquids, and gases or a combination of different forms of matter. In some mixtures the matter does not change. In other mixtures the matter does change.

In some mixtures the matter does not change because the matter does not interact. Each type of matter retains the same properties it had before it was mixed. For example, when you put different marbles in a box, each marble remains the same. Fruit salad, salad dressing, rocky road, ice cream, and soil are examples of mixtures made of matter that has not changed by being mixed. Can you think of others?

In a solution, matter is dissolved in a solid, a liquid, or gas. The matter is spread evenly throughout the solution. Sometimes when you combine solid matter or gas matter in a liquid, you may not see the matter's original properties. For example, salt crystals will dissolve in water. Air, coffee, and salt water are examples of solutions.