

Listening: States of Matter

Matter is made of atoms and molecules. Water for example is the H_2O molecule. This means that a molecule of water has 3 atoms. A water molecule has 2 hydrogen atoms and one oxygen atom. Substances like sugar have many atoms in their molecules. A molecule of sugar has many atoms, including carbon, hydrogen and oxygen.

Matter is made of molecules, such as H_2O , which is the water molecule. Matter can be in one of three states: solid, liquid or gas. Water and ice are the same substance, but they are in different states. These states depend on the temperature of the molecules. When we heat a substance, the molecules move faster and try to take up more space. When we cool a substance, the molecules move more slowly. When we cool a substance to its freezing point, it becomes a solid.

In a solid, the molecules move very little. Their positions are almost fixed. To be fixed means that their positions don't change. If we heat the molecules, they move faster and away from each other. The solid begins to melt, like ice cream on a hot day.

At a certain temperature, a solid begins to change into a liquid. The temperature at which a solid changes into a liquid depends on the substance. For water, the solid begins to change into a liquid when its temperature rises to above 0 degrees Celsius. For some substances, such as steel, the temperature at which it becomes a liquid is much higher. Steel often melts at around 1370 degrees Celsius.

If we continue to heat a liquid, the molecules move even faster. At a certain temperature, the liquid begins to change into a gas. For water, the liquid begins to change into a gas at 100 degrees Celsius. That is the boiling point of water.

Inside a star, such as our Sun, the temperature is very high. Everything inside the Sun is a gas. According to scientists, there are over 65 elements inside the

Sun. These include oxygen and iron. Over 90 percent of the Sun is hydrogen gas.

Listening: The Results

Yesterday there was an important science test. Lisa, Tom and 20 other classmates took the test. The test was about the states of matter, and how they are different. There were 25 questions on the test and they had 45 minutes to take it. Here are some of the test results. Two students got perfect scores. The lowest score was 68 out of a hundred. The average score was 86.3. Eleven students scored higher than average. Eleven students had below average scores.

Tom missed 2 questions on the test, so his score was 92. His score was the eighth highest in the class. Lisa missed two and a half questions, so her score was 90. Her score was the tenth highest score. Her score was 4 points higher than the average score. Lisa was disappointed with her test results. She studied hard for the test, but she still didn't do well. As a result, she plans to study harder for the next test. The next test will be in about two weeks.

Tom was surprised and happy with his test results. He didn't study hard, so his result was better than he expected. He was also happy that he did better than Lisa did.

Vocabulary: Emotions

She is screaming because she is really scared. Something is chasing her, so she is screaming for help. He is shouting because he is angry. When he is really angry, he often shouts like this. She is sleeping because she is tired. Last night she didn't get enough sleep, so today she has no energy. She is crying because she is sad. She got some bad news a few minutes ago. She is smiling because she is happy. Her boyfriend just called and he is returning from a long trip.

Vocabulary: Hobbies

This man is hiking up a mountain trail. He is wearing hiking boots and is carrying a pack on his back. This man enjoys cooking. He attends a cooking class once a week. This woman enjoys gardening. She grows flowers, such as roses, and vegetables, such as tomatoes in her garden. This boy loves playing games. He likes all kinds of games, including this video game on his computer. This old couple enjoys traveling. They take several trips a year, often to different countries.