



Pfsst...sizzle...phwoosh! You could be hearing a chemical reaction. A chemical reaction can happen when chemicals are mixed together. When a chemical reaction takes place, you might see a color change or bubbles form. Other signs of chemical reactions are when you see light or feel heat after the chemicals are mixed together.

Chemical reactions occur all around us! If you leave your bicycle out in the rain, the chain could rust. The rainwater reacts with the iron in your chain and oxygen from the air to make orange rust spots. When you cut an apple in half and leave it sitting on the table for a few minutes, a chemical reaction will occur. The apple turns brown because it is also reacting with the oxygen in the air.

Many toys use batteries to make them work. There is a chemical reaction inside the battery. You can't see that reaction, but you know it happens because when the batteries are there, your toy works when you turn it on. Sometimes you have to put a new battery into your toy because the chemicals have reacted completely and can no longer power the toy.

What toys use chemical reactions? Snap a light stick. Chemicals combine and give off light. Some toys contain chemicals that turn colors. For example, there are rubber ducks that change color if the water is too hot. There are markers with special inks that change colors when you write or completely disappear because of chemical reactions.

Toy makers use chemical reactions in developing new materials for toys. They make materials like plastics that can hold any sort of shape. They can be completely round like a ball, or detailed like a truck. Toy makers experiment with different chemicals to find the brightest colors to use in toys. They have tried many different chemical reactions to make slime slimier and balls bouncier.

Chemical reactions occur in many ways and they occur all around us. See what chemical reactions you can observe today!

