



Every time a sculptor, painter, or photographer creates a work of art, chemistry helps make it happen! Sculptures can be made of wood, metal, plaster, clay, marble, plastic, glass, or many other materials. Each material will act in a certain way that depends on the chemicals that make up the material. The chemicals control how the material can be carved, bent, chipped, or smoothed.

The paper or canvas an artist uses is made of chemicals. Pictures can be drawn with crayons, paints, pencils, or chalk. Each one of these is made from different kinds of chemicals and gives different effects an artist might want to create. Crayons are made mostly of wax that is produced from the chemicals in petroleum. Paints are made from either water or oil with added chemicals called pigments. Different kinds of pigments cause paints to have different colors. Although pencils are referred to as “lead” pencils, there is no lead in them. Instead, the material used for writing is a combination of clay and a chemical called graphite, which is made of the element carbon. Chalk contains a chemical called calcium carbonate, which is found in nature in a mineral called limestone.

Photography is the art of “painting with light”. Certain chemicals are sensitive to light. The amount of light that strikes the chemical will influence how dark the chemical turns. Photographs are produced when different amounts of light strike a surface covered with these kinds of chemicals.

No matter what kind of visual art is produced, it can be created because of chemistry. The next time you see a picture, sculpture, or photograph, remember that chemistry made it all possible!

