# Atom Models



MESS METER: 2 NO ADULT SUPERVISION REQUIRED



PREP TIME: 10 MINUTES EXPERIMENT DURATION: 10 MINUTES

#### Supplies Needed

Craft pom-poms in multiple colors Craft wire Glue dots

# Science Question: What do atoms look like?

Everything in the world is made of lots and lots of tiny "building blocks" called atoms. We can only see them with a powerful microscope. We will make models of atoms, so you can imagine what they look like.

## The Experiment

Atoms are a combination of protons, neutrons and electrons. In our model, each of the pom-pom colors will represent a different part of the atom. Create a nucleus by gluing the proton and neutron pom-poms together into a ball. The wires represent the paths that the electrons take around the nucleus. Cut or bend wires to make the outer rings of electrons. Look at the images of different common molecules and see if you can re-create them. If you have access to a computer, look up other atom molecules to re-create.

## The Outcome

Everything in our Earth is made of a combination of these elements. If you could see down to the molecular level of something, you would find these elements in atoms and know what the thing was made of.

#### Variation

• Instead of pom-poms, you could do this with different colored marshmallows.

#### Did You Know?

An adult male has around 7,000,000,000,000,000, 000,000,000,000 atoms in his body—that's twentyseven zeroes!

