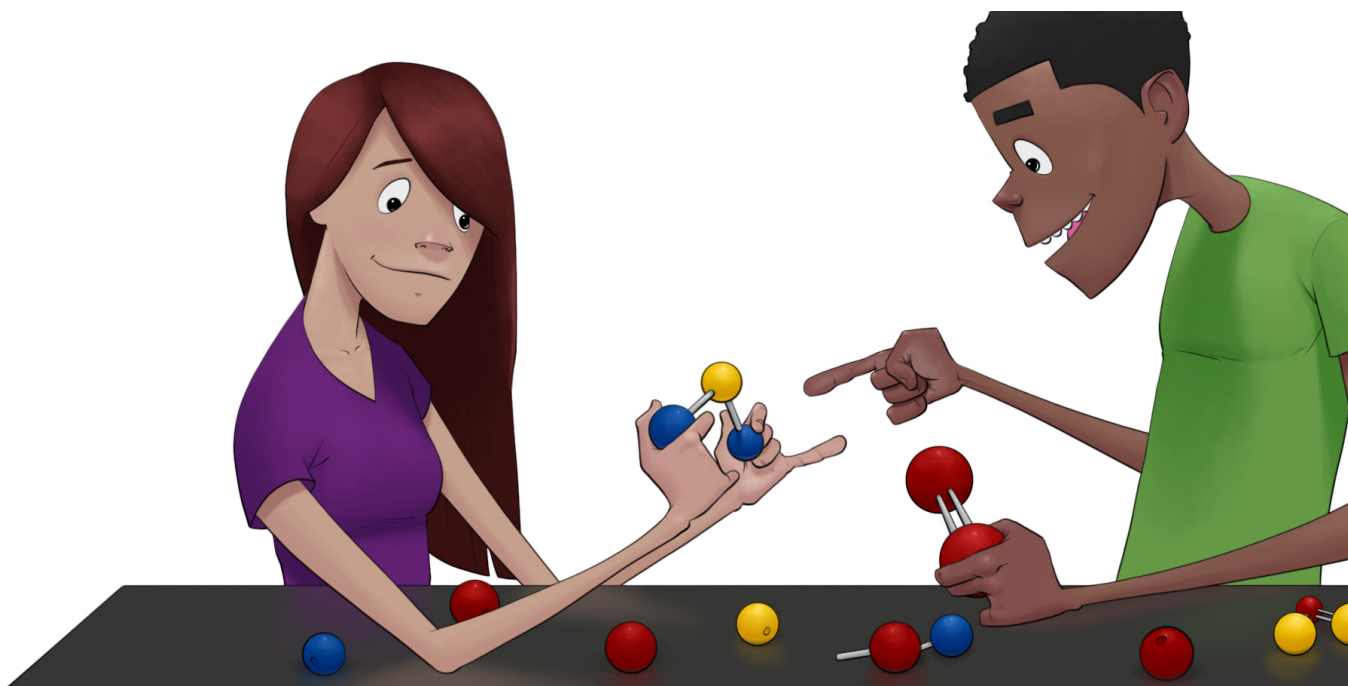
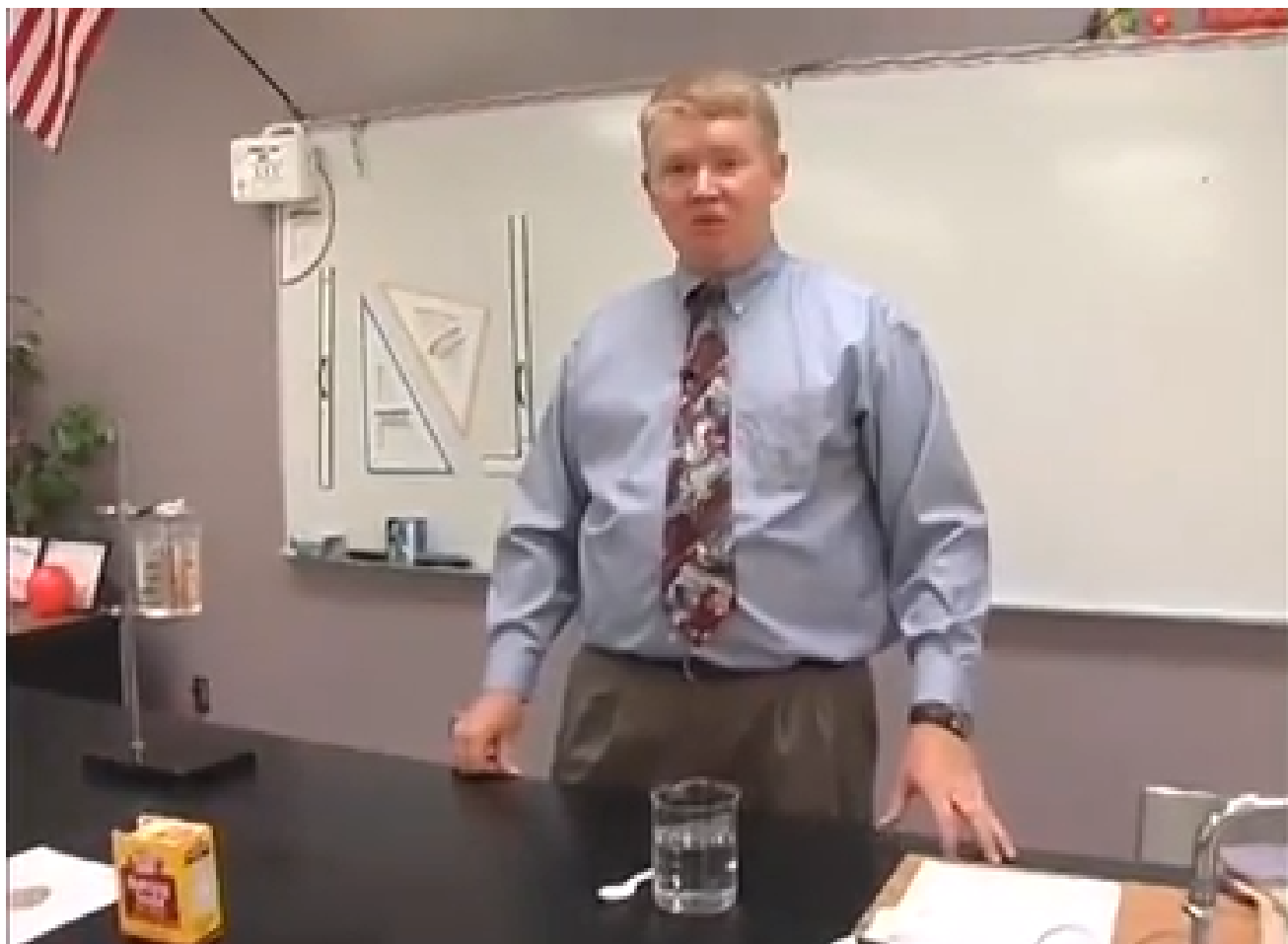


Unit 5 Introduction



Atoms and Molecules

In the last unit you learned about the properties of matter. Matter is the stuff that makes up the universe. But what is matter really made of? Scientists have discovered more details about what makes up matter and explained these using different models of matter. If you take a closer and closer look at matter you will find that there are small building blocks of matter. The smallest “piece” of matter that still keeps its properties is called an atom. In this unit you will learn about atoms—what they are like, how they interact, and how the atoms of different substances are similar or different. You will also learn about the nucleus of atoms and where nuclear energy comes from.



Video 5.1. Atoms and Molecules

© BYU Independent Study

Learning Outcomes

1. Describe the structure of atoms.
2. Distinguish between elements, compounds, mixtures, and solutions.
3. Describe three kinds of radiation—alpha, beta, and gamma.
4. Explain how an element can undergo nuclear transformation into another element.
5. Use half-life to determine the age of objects or how much of a substance remains after a given amount of time.

