## Science IDEAS Writing Prompt: Matter, Tab 7, Expository

READ INQUIRE	Mixtures and solutions are both made up pf matter.
EXPLAIN	
	Think about how mixtures and solutions are similar and different.
	Think about now mixtures and solutions are similar and different.
	Now, write to explain to the reader how mixtures and solutions are simi-
	lar and different.

You have learned that atoms are made up of three smaller particles and
how those particles are arranged.

Think about how particles are arranged inside atoms.

READ INQUIRE EXPLAIN

Now, explain to the reader of your paper how the three particles are arranged inside atoms.

In 1869, a Russian scientist named Dmitri Mendeleev developed a way to organize the elements. He grouped and organized them according to their characteristics. We call this chart the **periodic table of elements**.

Think about how the periodic table is arranged.

READ INQUIRE EXPLAIN

> Now, explain to the reader of your paper how elements are arranged on the periodic table.

READ INQUIRE EXPLAIN	Most of common matter is made of two or more different materials com- bined to form a mixture. Matter is a mixture if the materials that make it up keep their original properties and characteristics. For example, a fab- ric can be a mixture of 60% cotton and 40% polyester, or a salad can be a mixture of lettuce, tomatoes, and carrots.
	Think about some things you might combine to form a mixture.
	Now, tell a story about a mixture you created.

All atoms are made of smaller particles. The particles known as protons and neutrons make up the nucleus. Particles called electrons move around the nucleus. Think about how the nucleus is the center of the atom, just like the sun is the center of the solar system.
Now, tell a story about the nucleus of your life.

READ INQUIRE EXPLAIN Marie Curie (1867-1934), a Polish-French scientist, along with her husband, discovered the elements polonium and radium and invented the term "radioactivity". Their discoveries helped scientists learn more about atoms and elements.

Think about what you know about the physical and chemical properties of elements.

Now, tell a story of how you discovered a new element. Describe any unique physical and chemical properties of the element, and give it a name.