

SECTION PROPERTIES ARE USED TO IDENTIFY SUBSTANCES.

2.3 Reading Study Guide A

BIG IDEA Matter has properties that can be changed by physical and chemical processes.

KEY CONCEPT Properties are used to identify substances.

Review

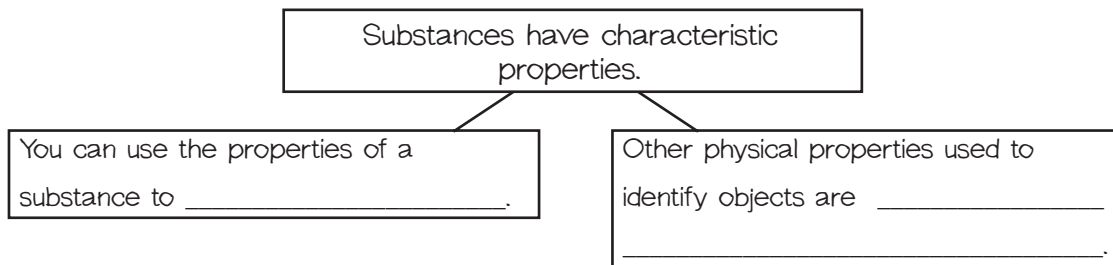
1. If the sentence is true, write *T*. If it is false, change the underlined word to make it true.

Matter cannot change from one state to another. _____

Changes in state require electric changes. _____

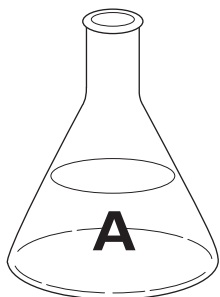
Take Notes**I. Substances have characteristic properties. (p. 58)**

2. Fill in the main-idea web for the main idea shown.

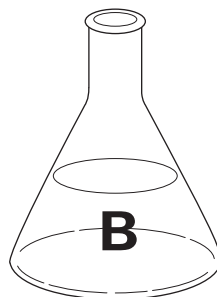
**A. Identifying Unknown Substances (p. 59)**

3. If you didn't know what something was, what are some of the properties you might observe?

4. A student has two vials of clear liquids, as shown below. She knows that one of the two vials contains pure water. The other vial does not. For each vial, she observes the properties listed for it. Which vial is water? How do you know?



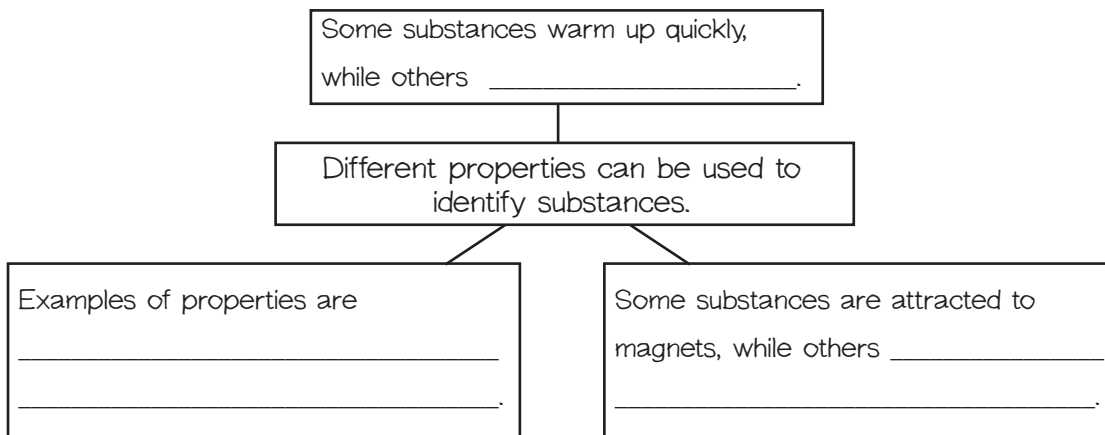
strong odor
slippery texture
clear in color
boiling point 135°C



no odor
wet, but not slippery texture
clear in color
boiling point 100°C

B. Properties Used For Identifying Substances (p. 59)

5. Fill in the main-idea web for the main idea shown.

**II. Mixtures can be separated by using the properties of the substances in them. (p. 61)**

6. Give two examples of how mixtures can be separated by using the properties of the substances in them.

7. The tray below contains sawdust mixed with steel nails. You want to use the sawdust, but you need to get the nails out first. Describe two methods that you could use to separate the nails from the sawdust.

