

Name: \_\_\_\_\_

# I'm Melting!

One of the clues that helped you determine the mystery element in "Name that Element!" (pp. 12-14) was the element's high melting point. An element's melting point is the temperature at which it changes from a solid to a liquid. Complete the chart and answer the questions below in complete sentences to learn more about the melting points of a selection of elements from the periodic table. We did the first one for you.

## Elements and Their Melting Points

Element Name	Element Symbol	Melting Point (in degrees Celsius)	Metal or Nonmetal?
Helium	He	-272	Nonmetal
Hydrogen		-259	
Neon		-249	
Oxygen		-218	
Nitrogen		-210	
Chlorine		-101	
Mercury		-39	
Francium		27	
Rubidium		39	
Sulfur		113	
Silver		962	
Gold		1,064	
Iron		1,535	
Tungsten		3,410	
Carbon		3,500	

SOURCE: [www.webelements.com/periodicity/melting\\_point](http://www.webelements.com/periodicity/melting_point)

### Analyze the Data

- Which *metal* has the highest melting point on your chart? Lowest melting point?
- Which *nonmetal* has the highest melting point on your chart? Lowest melting point?
- Ice (solid water) melts at 0°C (32°F). Which element on your chart has a melting point nearest to water's melting point?
- At what temperature (in degrees Celsius) does water boil? Which element has a melting point closest to that temperature?
- Consider the statement: "Metals always have higher melting points than nonmetals." Use your data to evaluate whether that statement is true or false.