



Reading Science

Name: _____ Date: _____

It's Hot... but Not That Hot



- 1 It was hot when Lina stepped out of her house. She could tell that it was going to be a hot day because the sunlight was very bright. Her bicycle also felt hot when she touched it. She rode her bicycle **furiously** on her way to school. When she reached school, she was tired and covered in sweat. "It is boiling out there," she said to her teacher.
- 2 Her teacher smiled and said, "It is certainly warm, but it is not quite boiling. Let us look at the thermometer to see exactly how warm it is."
- 3 Lina read the thermometer when she reached her classroom window. She saw that it was 91 degrees. She knew that it was eight o'clock in the morning. "Oh no, nine more degrees, and it *will* be boiling. Help!" she screamed. "We are all going to melt!"
- 4 The class laughed at Lina. The teacher was able to calm her down. "Take it easy there, little one. You should be worried if you had read the temperature in degrees Celsius. Look at the thermometer you are reading. It is in degrees Fahrenheit. Both the Celsius and Fahrenheit thermometers are based on the freezing and boiling point of water, but they are different."
- 5 Her teacher went on to say, "In a Celsius scale, the freezing point of water is set at zero degrees. On the other hand, a Fahrenheit scale is set at 32 degrees. The boiling points for both scales are also different. In a Celsius scale, the boiling point of water is set at 100 degrees. In a Fahrenheit scale, the boiling point of water is set at 212 degrees. Most places around the world use the Celsius scale, but the Fahrenheit scale is used in the United States."
- 6 "That is strange," Lina said. "Why is it difficult for everyone to use the same scale?"
- 7 "I am not sure," said her teacher. "If we used the same scale all over the world, it would make things easier. For example, we could communicate more easily with others. Maybe, people here do not want to change."



Reading Science

- 8 He then walked over to the window, “Let us look closely at both thermometers. This will help us see the difference. Earlier you looked at the thermometer. That one used the Fahrenheit scale. Now, can you read it again?”
- 9 “It is 93 degrees now,” Lina said. “It is getting hotter for sure. We are far away from being able to boil water outside. If you look again at the Fahrenheit scale, we will not be able to do that for a while. The temperature will have to get to 212 degrees for us to be able to boil water. Am I right?”
- 10 “That is right,” her teacher said. “And now, look at this thermometer. Can you see what the temperature is on the Celsius scale?”
- 11 Lina frowned and looked at the red line. She read the number carefully. “It is about 34 degrees Celsius. Now, I can say that we have quite a way to go before water could boil.”
- 12 “Right,” her teacher said. “Like I told you a short while ago, the Celsius scale is different. The boiling point of water on the Celsius scale is 100 degrees.”
- 13 “I get it,” Lina said. “Before, I thought it was boiling because I confused the Fahrenheit scale with the Celsius scale.”
- 14 “Exactly,” her teacher said. “Both are different ways of measuring temperature. The same thing is said in a different way. Their scales are different. However, they mean the same thing. For this reason you must know which unit of measurement you are using. I am sure you would not want to scare the rest of the class by telling them it is boiling, would you?”
- 15 “No,” Lina said with a wink, as she went back to her seat. “I would never want to scare anyone.”



Reading Science

1. This passage is mainly about –
 - A. how Lina likes to scare people.
 - B. the various types of thermometers throughout history.
 - C. the work of Galileo.
 - D. the difference between the Fahrenheit and Celsius scales.

2. What is the boiling point of water?
 - A. 10°C
 - B. 0°C
 - C. 100°C
 - D. 212°C

3. What is the temperature when Lina looks at the Celsius scale (paragraph 11)?
 - A. 93°
 - B. 100°
 - C. 34°
 - D. 212°

4. The author says that Lina rode her bike **furiously** (paragraph 1). What does this word mean in this passage?
 - A. She was angry.
 - B. She went fast.
 - C. Her bike had fur on it.
 - D. There was a storm.



Reading Science

5. Which of the following statements is true?
- A. The Celsius scale is better than the Fahrenheit scale.
 - B. The Fahrenheit scale is better than the Celsius scale.
 - C. Water boils at 212° Fahrenheit.
 - D. Water boils at 212° Celsius.