Mrs. Glosser's Math Goodies

Integers and Science Worksheet Key

Use your knowledge of integers to solve each problem.

1. The melting point of sodium is 98 degrees Celsius (°C) and the melting point of zinc is 420 °C. How much hotter is the melting point of zinc than that of sodium? **420°C – 98°C = 330°C**

2. The average temperature of Venus is 480 °C. The average temperature on Pluto is ⁻230 °C. How much warmer is Venus than Pluto? **480°C – ⁻230°C = 480°C + ⁺230°C = 710°C**

3. Aluminum melts at 659 °C and copper melts at 1083 °C. What is the difference between the melting points of aluminum and copper? **659°C – 1083°C = ⁻424°C**

4. The boiling point of water is 212 degrees Fahrenheit (°F). Propane boils at about ⁻44 °F. How much hotter is the boiling point of water than that of propane? **212°F – ⁻44°F = 212°F + ⁺44°F = 256°F**

5. Unleaded gas freezes around ⁻150 °F. Water freezes at 32 °F. What is the difference between the two freezing points? **32°F – ⁻150°F = 32°F + ⁺150°F = 182°F**

6. The temperature on Mercury varies from 400 °C on the day side to ⁻180 °C on the dark side. What is the difference in temperature? **400°C – ⁻180°C = 400°C + ⁺180°C = 580°C**

7. The freezing point of oxygen is ⁻218.79 °C and hydrogen is ⁻252.8 °C. A lab is lowering the temperature inside a fridge. Which freezes first? How much colder does it have to be for both to freeze? **Oxygen freezes first since ⁻218.79 °C > ⁻252.8 °C**

   ⁻218.79 °C - ⁻252.8 °C = ⁻218.79 °C + ⁺252.8 °C = 34.01 °C

8. The temperature in Montreal, Quebec at 3 pm is 1 °C. The temperature drops to ⁻9 °C at 3 am. How many degrees did the temperature drop? **1°C – ⁻9°C = 1°C + ⁺9°C = 10°C**

9. The moon experiences many extremes in temperature because it has no atmosphere. For example, on the side of the moon that the sun is shining on, the temperature can reach 260 °F. On the dark side of the moon, it gets as cold as ⁻280 °F. How much is the drop in temperature from day to night? **260°F – ⁻280°F = 260°F + ⁺280°F = 540°F**

10. Gold melts at 1946 °F. Silver melts at 1762 °F. How much cooler is the melting point of silver than gold?

    1762°F – 1946°F = ⁻184°F