

Thermal Energy and Heat ▪ *Review and Reinforce*

Temperature, Thermal Energy, and Heat

Understanding Main Ideas

Write an answer for each of the following questions in the spaces provided.

1. If two glasses of water have the same temperature, do they necessarily have the same thermal energy? Explain.

2. Fill in the blanks in the table below.

	Temperature Scales		
Temperature	Kelvin (K)	a.	Fahrenheit (°F)
absolute zero	b.	-273°	-460°
water freezes	273	c.	32
water boils	373	100	d.

Building Vocabulary

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

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|---------------------------|--|
| _____ 3. temperature | a. the temperature scale used in most of the world |
| _____ 4. Fahrenheit scale | b. a measure of the average kinetic energy of the individual particles in an object |
| _____ 5. Celsius scale | c. thermal energy that is transferred |
| _____ 6. Kelvin scale | d. the temperature at which no more energy can be removed from matter |
| _____ 7. absolute zero | e. a temperature scale in which the interval between the freezing point of water is divided into 180 equal parts |
| _____ 8. heat | f. a temperature scale with no negative numbers |
| _____ 9. specific heat | g. energy required to raise 1 kg of material by 1 kelvin |