Automotive Heating and Air Conditioning, 9th Edition

Chapter 2 Heating and Air-Conditioning Principles NAME SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question. 1. Is it possible for heat to be added to water without causing the temperature to increase? 2. What are the three states of matter? 3. What is the difference between heat and temperature? 4. How is relative humidity measured? 5. How does heat move?

Answer Key

Testname: AHAC9SHORT02

1. Yes because it requires heat to transform a substance from one state to another. This added heat does not result in a increase in temperature.

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- 2. 1. Solid
 - 2. Liquid
 - 3. Vapor (Gas)

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3. Temperature is the measure of the level of energy and is measured in degrees whereas heat expresses the amount of heat needed to raise the temperature of one gram of water one degree Celsius. Heat is also measured in British Thermal Units (BTU).

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4. Relative humidity is commonly measured with a hygrometer or a psychrometer.

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- 5. Heat can travel through one or more of three paths as it move from hot to cold:
 - 1. Conduction
 - 2. Convection
 - 3. Radiation.

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