

Chapter 16 – Temperature and Heat Transfer

Learning Grid

Temperature and Heat Transfer	Questions	Answers
	Define temperature.	
	What is absolute zero?	
	What is the equation to convert between Celsius and Kelvin?	
	What is a thermometric property?	
	List four thermometric properties used in thermometers.	
	How does a fire alarm use thermal expansion?	
	What is conduction?	

Temperature and Heat Transfer	Questions	Answers
	Which materials are good and which poor conductors?	
	What is convection?	
	What is a convection current?	
	Why is the heating element in a kettle placed at the bottom?	
	What is radiation (in heat transfer)?	
	Why do black surfaces feel hotter in sunlight than white ones?	
	What surface properties affect radiation rates?	

Temperature and Heat Transfer	Questions	Answers
	What is a U-value?	
	What is meant by energy efficiency?	
	State the equation for energy efficiency.	
	Why are LED bulbs more efficient than filament bulbs?	
	What is meant by payback time?	
	Describe two ways to improve insulation in the home.	