

Y8 Physics	8K Energy Transfer Learning Checklist	I can do this already	Covered in Class	Strength or weakness?	Revised it?
8K1 Temperature Changes	Developing: Recall that energy will be transferred from hotter to cooler objects or materials.				
	Securing: Explain how thermal (or internal) energy and temperature are different, and recall the factors that affect the temperature of an object.				
	Securing: Recall that evaporation can cool a liquid, and ways of reducing this.				
	Exceeding: Use the particle model of matter to explain cooling by evaporation.				
8K2 Transferring Energy	Developing: Describe how energy is transferred in conduction, convection and radiation.				
	Securing: Recall some examples of thermal conductors and insulators, and explain why certain materials are used for given purposes.				
	Securing: Use the particle model to explain how energy is transferred in conduction and convection.				
	Exceeding: Explain which energy transfer processes are taking place in given situations.				
8K3 Controlling Transfers	Developing: Describe ways of reducing energy transfers by conduction, convection and radiation.				
	Securing: Recall which colours are good and poor emitters and absorbers of radiation.				
	Exceeding: Evaluate ways of increasing or decreasing energy transfers.				
8K4 Accuracy and Precision	Developing: Identify the main parts of a flower and describe their functions.				
	Securing: Describe how the parts of a flower are adapted to their functions.				
	Exceeding: Explain how and why plants avoid self-pollination.				
8K5 Power and Efficiency	Developing: Interpret Sankey diagrams.				
	Securing: Describe what power means, and how to find the power rating of an appliance.				
	Securing: Explain what efficiency means, and identify useful and wasted energies.				
	Exceeding: Calculate the efficiency of appliances.				
8K6 Paying for Energy	Developing: Recall how electricity and natural gas bills are calculated and the units used.				
	Securing: Calculate payback times				
	Exceeding: Use data to decide which insulation provides the best payback time.				
8K7 Keeping Warm	Developing: To explain thermal energy transfer in conduction, convection, radiation and evaporation.				
	Exceeding: To identify how energy can be lost to the surroundings and how to survive extremes in climate.				

For more help:

Read your 8K Summary Sheets for information on key points from the lesson.

Email your class teacher: (firstinitial)(lastname)@ndhs.org.uk *E.G. sfrise@ndhs.org.uk*

Look up your topic up on BBC bitesize by typing 'BBC Bitesize +keyword' into google.

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