

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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