YEAR 9 GCSE (A- F) – PHYSICS

WEEK 4 (20ᵗʰ Sept to 24ᵗʰ Sept)

Work Sent to the students through Google classroom

Topic: Energy Efficiency and Keeping warm

Resources: Worksheet, GCSE science free lesson video, power point.

Date	Lesson	Topic	Mode of Teaching	
20ᵗʰ Sept. Sunday **(Girls)** 20ᵗʰ Sept. Sunday **(Boys)**	4 8	**Learning Objective :** *Explain that mechanical processes become wasteful when they cause a rise in temperature so dissipating energy in the surroundings. * Discuss the ways of reducing unwanted energy transfer including through lubrication, thermal insulation. * Recall and use the equation: efficiency = (useful energy transferred by the device) / (total energy supplied to the device). * Explain how efficiency can be increased. **Learning outcome :** *Explain some ways in which energy is transferred wastefully by mechanical processes. *Explain some ways of reducing unwanted energy transfers in mechanical processes. *Define what efficiency means. *Explain how efficiency can be increased. *Recall and use the equation for calculating energy efficiency.	**Zoom**	Teacher uses power point presentation that contains interactive questions. **H.W:** Energy efficiency worksheet

22nd Sept. Tuesday – **(Girls)** 24th Sept. Thursday **(Boys)**	3 5	**Learning Objective :** *Discuss how heat is transferred by conduction, convection and radiation. *Explain how heat transfers can be minimised by a vacuum flask. **Learning outcome** *Describe how heat is transferred by conduction, convection and radiation. *Define the meaning of thermal conductivity. *Explain how heat transfers can be minimised by a vacuum flask.	**Zoom**	Teacher uses power point presentation that contains interactive questions.
22nd Sept. Tuesday – **(Girls)** 24th Sept. Thursday **(Boys)**	4 6	**Learning Objective :** To solve the worksheet by applying the concept of conduction, convection and radiation. **Learning outcome:** Students will be able to reinforce the concepts learned in the previous lesson by doing the worksheet	**GC**	Worksheet assigned through GC Instruction will be given in the GC to complete the worksheet