

Year 10 Home Learning Grid – Physics

For wb 1st 8th and 15th June



Department of
Science

You can select to do these tasks in any order that you choose. You must complete any boxes marked in yellow. Orange boxes indicate simpler tasks and bright green shows challenge tasks.

You will need to use a Physics Equation Sheet to help you with some of these.

Answer the hard Physics quiz on Educake and try to achieve more than 80%	Draw a picture of an object that has: <ul style="list-style-type: none"> • A large kinetic energy store • A large chemical energy store • A large thermal energy store 	Watch a FreeScienceLessons YouTube video about Physics and summarise the key points in a poster.	Use the internet to research some household objects that are energy efficient. Why is it an advantage that they are energy efficient?
Imagine that there are plans to bulldoze the golf course and a new power station will be built in Stocksbridge. Decide which type of power station should be built. Present your work as a poster or a letter to the council.	Name all the stores (types) of energy.	Find five appliances in your home. Using the power rating that will be on a sticker, calculate the amount of energy that will be transferred if each one is used for 60 seconds. For a challenge, do it for 5 minutes.	Answer the easy Physics quiz on Educake and try to achieve more than 80%
Design an experiment to determine the store of gravitational potential energy in a bowling ball and a tennis ball both held 2m above the ground. Which has a greater store?	Complete the Separate Science exam questions Exam Pack– <i>For Separate Science students only</i>	Look at some objects in your house and name the energy transfers that take place. For example, what is the input energy that goes in to make it work; and what does it get converted into?	Draw a table to compare the advantages and disadvantages of each way of generating electricity. You can include renewable and non-renewable resources.
Think of a Physics topic you have studied either in Year 9 or Year 10. Plan a mini lesson that you could teach to someone at home	Learn 5 physics equations off by heart. <i>(I know this was on last time, but it's actually Physics this week.)</i>	Set yourself twenty questions on Educake on a topic you completed in Year 9.	Produce 10 flashcards based on the key points from Module 1 – Energy.