GCSE Checklist – Energy Transfers

By the end of this topic (most of Topic 1a in the AQA GCSE Physics textbook, pages 22-46), you should be able to do the following things:

		Page(s)
Name all eight **energy stores** and give examples for each		22
Define the term '**closed system**'		22
Describe the four methods of **energy transfer**		23
Give **examples** of energy transfers		23, 24
Define the term '**work done**'		23
State the principle of **conservation of energy**		24
Describe how energy can be '**wasted**' or '**dissipated**'		24, 25, 41
State, rearrange and use the equation for **kinetic energy**		26
State, rearrange and use the equation for **gravitational potential energy**		27
Describe the energy transfers when an object falls or is thrown in the air		28
Calculate the maximum height of a thrown object, or maximum speed of a falling object		29
Rearrange and use the equation for **elastic potential energy**		28
Define the term '**power**'		33
State, rearrange and use two **equations** for power		33
Describe all of the ways in which we can **reduce unwanted** energy transfers, such as lubrication or thermal insulation		37-39
Define the term '**efficiency**'		40
State, rearrange and use the **equation** for 'efficiency'		40
Discuss methods of **improving efficiency**		41
State the units related to all quantities used in the topic		22-46

Key Vocabulary

energy transfer store conservation efficiency

dissipate lubrication insulation thermal potential

gravitational elastic kinetic work done power

closed system friction