CP7a Work and power

Word	Pronunciation	Meaning
energy		Something that is needed to make things happen or change.
power		The amount (rate) of energy transferred per second. The units are watts (W).
watts (W)		The unit for measuring power. 1 watt = 1 joule of energy transferred every second.
work done		A measure of the energy transferred when a force acts through a distance.

CP8a Objects affecting each other

Word	Pronunciation	Meaning
action−reaction forces		Pairs of forces on interacting objects. Action–reaction forces are always the same size, in opposite directions, and acting on different objects. They are not the same as balanced forces, which act on a single object.
contact forces		Forces where there needs to be contact between objects before the force can have an effect (e.g. friction or upthrust).
electric field/ electrostatic field		The space around an object with a charge of static electricity, where it can affect other objects.
force field		The space around something where a non-contact force affects things. Examples include magnetic fields and gravitational fields.
friction		A force between two surfaces that resists motion.
gravitational field		The space around any object with mass where its gravity attracts other masses.
magnet		An object that has its own magnetic field around it.
magnetic field		The area around a magnet where it can affect magnetic materials.
magnetic material		A material such as iron that is attracted to a magnet.
magnetism		The force caused by magnets or magnetic materials.
magnitude		The size of something, such as the size of a force or the measurement of a distance.
non-contact force		A force that can affect something from a distance (e.g. gravity).
normal contact force		A force that acts at right angles to a surface as a reaction to a force on that surface.
scalar quantity		A quantity that has a magnitude (size) but not a direction. Examples include mass, distance, energy and speed.
static electricity		Electric charges on insulating materials.

Word	Pronunciation	Meaning
upthrust		A force that pushes things up in liquids and gases.
vector		A quantity that has both size and direction.

CP8b Vector diagrams

Word	Pronunciation	Meaning
component (forces)		One of two forces at right angles to each other, resolved from a single force.
free body force diagram		A diagram of an object showing all the forces acting on it and the size and direction of those forces.
net force		Another term for resultant force.
resolving (forces)		Representing a single force as two forces at right angles to each other.
resultant force		The total force that results from two or more forces acting upon a single object. It is found by adding together the forces, taking into account their directions. Another term for net force.
scale diagram		A way of working out the resultant forces or component forces by drawing a diagram where the lengths of arrows represent the sizes of the forces.
vector diagram		A diagram on which vectors are displayed (e.g. a scale diagram, a free body force diagram).