

Physics 1 a Week Activity		Key Stage 3	41 st Week
Name:		Class:	
An electric motor is used to lift a weight. i. State the equation used to calculate efficiency. ii. The motor is supplied with 400 J of electrical energy. It transfers 320 J of this energy into a useful store of gravitational potential energy. Calculate the efficiency of the motor. Efficiency = ... iii. Calculate the amount of energy wasted by the motor. Wasted energy = ...			
A motorcyclist is climbing a hill at a constant speed of 13 m/s. Calculate the time it takes for the motorcyclist to travel 29 m. Time = ...	The work done to stop a car is 510 000 J. The car has a mass of 1400 kg. Calculate the velocity of the car before the brakes were applied. Velocity = ...		