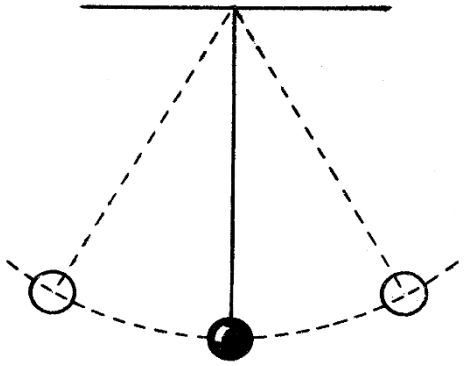


P1 Energy conservation and dissipation revision questions

1	What kind of energy store does a moving object have?	
2	What kind of energy store does a battery have?	
3	Give 3 ways in which energy can be transferred	
4	State the law of energy conservation	
5	What is the unit of work?	
6	When work is done against friction in where does the energy transfer to?	
7a	A motor lifts a 2 kg mass through a height of 10m. Calculate the work done by the motor	
7b	In the same time the motor has 250J of electrical energy input to it. Calculate the efficiency of the motor	
7c	What measurement would be needed to calculate the output power of the motor?	
8	Give 3 ways you could improve the efficiency of an electric motor?	
9	Calculate the energy used by a 12W bulb in 2 minutes	
10	Calculate the kinetic energy of a 100g ball thrown at 3 m/s	
11	What would happen to the kinetic energy if the speed were doubled?	
12	Describe the energy transfers which occur when an object falls from a height (include air resistance)	
13	Ignoring air resistance – what can we say about the kinetic energy gained by a falling object ?	
14	 <p>Mark on the energy types on the picture Sketch a graph of Energy against time, showing 2 different types.</p>	15
		Ignoring air resistance – calculate the speed of the 3kg pendulum bob at the bottom of it's swing if it released from its high point which is 0.25m above the bottom of the swing.