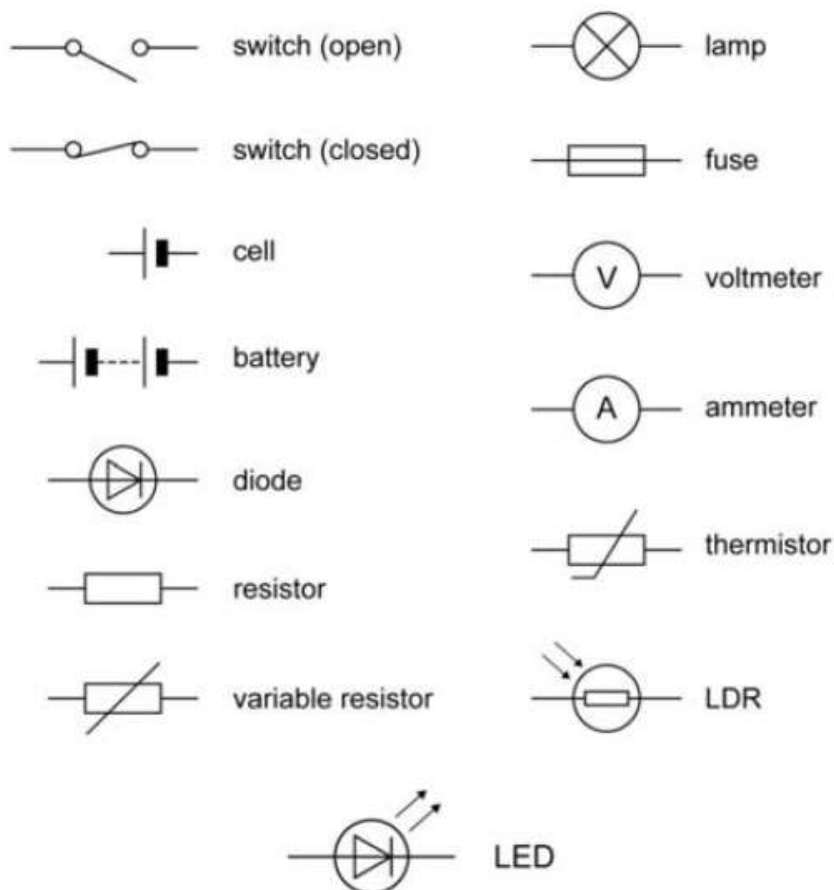


Review P2.2 Kinetic energy of moving objects

<i>Can you...?</i>	😊	😐	😞
P2.2.1 Forces and energy			
Describe 'work done' in terms of forces causing objects to move			
Explain how the kinetic energy of an object increases or decreases when its speed changes			
Calculate work done (W) from force (F) and distance moved in a direction (d)			
State that energy is transferred when work is done, for example against frictional forces			
Evaluate the benefits of different types of braking system, such as regenerative braking			
Calculate Power (P) from work done or energy transferred (E) and time (t)			
Calculate gravitational potential energy (E_p) from mass (m), gravitational field strength (g) and change in height (h)			
Calculate kinetic energy of an object (E_k) from its mass (m) and speed (v)			
P2.2.2 Momentum			
Calculate the momentum of an object (p) from its mass (m) and velocity (v)			
Explain that, in a 'closed system', the total momentum before an event (such as a collision or explosion) is equal to the total momentum after the event			
Evaluate the benefits of air bags, crumple zones, seat belts and side impact bars using ideas of energy and momentum			



Circuit symbols that should be known for P2.3 Currents in electrical circuits