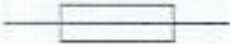


Q.	Answer	Mark	Additional Guidance
1. (a)		8	
(b)	buzzer		
(c)	Earth's magnetic poles		
(d)	D		
(e)	Earth has orbited half way round the Sun		
(f)	the Sun		
(g)	higher amplitude		
(h)	7 N to the left		
2. (a)	strain potential to kinetic	2	
(b)	120 m/s. $60 \div 0.5$ (1)	3	
	120 (1)		
	m/s (1)		
(c)	transferred to sound and thermal	2	
3. (a) (i)	planets orbit stars	2	
	stars are luminous		
(ii)	planets are orbited by moons	1	
(b)	radiation	2	
	conduction		
(c)	radiation	1	
(d)	any three of: hot surface warms gas gas expands becomes less dense hot gas rises cooler gas sinks energy from sun heats surface	3	do not allow 'heat rises'