

Core Practical		"Techniques and apparatus" - Appendix 5c											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Determine the acceleration of a freely falling object.	✓	✓		✓						✓		
2	Determine the electrical resistivity of a material.	✓	✓			✓	✓	✓					
3	Determine the e.m.f. and internal resistance of an electrical cell.		✓				✓	✓					
4	Use a falling-ball method to determine the viscosity of a liquid.	✓	✓	✓	✓	✓							
5	Determine the Young modulus of a material.	✓				✓							
6	Determine the speed of sound in air using a 2-beam oscilloscope, signal generator, speaker and microphone.	✓		✓					✓	✓			
7	Investigate the effects of length, tension and mass per unit length on the frequency of a vibrating string or wire.	✓	✓						✓				
8	Determine the wavelength of light from a laser or other light source using a diffraction grating.	✓		✓							✓		
9	Investigate the relationship between the force exerted on an object and its change of momentum.	✓		✓	✓							✓	
10	Use ICT to analyse collisions between small spheres, e.g. ball bearings on a table top.			✓		✓						✓	
11	Use an oscilloscope or data logger to display and analyse the potential difference (p.d.) across a capacitor as it charges and discharges through a resistor.		✓				✓		✓			✓	
12	Calibrate a thermistor in a potential divider circuit as a thermostat.	✓	✓	✓			✓						
13	Determine the specific latent heat of a phase change.	✓	✓										
14	Investigate the relationship between pressure and volume of a gas at fixed temperature.	✓											
15	Investigate the absorption of gamma radiation by lead.		✓	✓		✓							✓
16	Determine the value of an unknown mass using the resonant frequencies of the oscillation of known masses.	✓	✓	✓	✓							✓	

	CPAC statements										
	1a	2a	2b	2c	2d	3a	3b	4a	4b	5a	5b
1		<u>y</u>			<u>y</u>			<u>y</u>			
2			<u>y</u>			<u>y</u>					<u>y</u>
3		y			y					y	
4	<u>y</u>		<u>y</u>						<u>y</u>		
5							<u>y</u>	<u>y</u>			<u>y</u>
6		y			y				y		
7				<u>y</u>		<u>y</u>				<u>y</u>	
8	<u>y</u>						<u>y</u>	<u>y</u>			
9				<u>y</u>		<u>y</u>			<u>y</u>		
10		<u>y</u>			<u>y</u>					<u>y</u>	
11			<u>y</u>			<u>y</u>					<u>y</u>
12		<u>y</u>		<u>y</u>				<u>y</u>			
13			y				y		y		
14	y			y						y	
15							<u>y</u>		<u>y</u>		<u>y</u>
16	<u>y</u>				<u>y</u>			<u>y</u>			