

Appendix 9 Circuits and switches equipment list

EQUIPMENT ITEM	QUANTITIES	LESSON SESSION																
		1	2	2	3	4	4	5	6	7	7	8						
Equipment and materials																		
battery (1.5V)	1 per team		•											•				
battery (1.5V)	1 per team					•												
battery (1.5V)	3 per team																	
bicycle	1 per class													•				
buzzer, electric (3V)	1 per class																	
buzzer, electric (3V)	1 per team																	
collection of different-sized batteries	per team																	
elastic bands	2 per team																	
light bulb (1.5V) or LED	1 per team																	
light bulb (1.5V)	3 per team																	
light bulb holder and battery holder	1 per team																	
materials to make models	per class																	
metal items (eg, paperclips, thumb tacks, aifoil, split pins)	per team																	
mobile phone	1 per class																	
motor, electric (1.5V)	1 per class																	
motor, electric (1.5V)	1 per team																	
Ohmmeter <i>optional</i>	1 per team																	
plastic items (eg, straws)	per team																	
rubber items (eg, rubber bands, balloons)	per team																	
spare light bulbs, batteries and wire	per class																	
stripping pliers or knife	1 per class																	
tape, self-adhesive	per team																	
torch, battery-operated	1 per class																	
torch, inside components (eg, wires, bulb, batteries)	per class																	
torches, old <i>optional</i>	per class																	
wire, 10 cm length, with ends stripped of insulation	2 per team																	
wire, 10 cm length, with ends stripped of insulation	3 per team																	
wire, 10 cm length, with ends stripped of insulation	6 per team																	
wooden items (eg, toothpicks, corks)	per team																	

EQUIPMENT ITEM	QUANTITIES	LESSON		1		2		3		4		5		6		7		8	
		SESSION	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
Resource sheets																			
'Light it up!' (RS1)	1 per team member		•	•															
'Light it up!' (RS1), enlarged	1 per class		•	•															
'Perplexing circuits' (RS2)	1 per team member				•														
'Perplexing circuits' (RS2), enlarged	1 per class				•														
'Appliances survey' (RS3)	1 per team member					•													
'Appliances survey' (RS3), enlarged	1 per class					•													
'Alessandro Volta: Battery maker' (RS4)	1 per student									•									
'Alessandro Volta: Battery maker' (RS4), enlarged	1 per class									•									
'Energy sources' (RS5)	1 per student										•								
'Energy sources' (RS5), enlarged	1 per class										•								
'Chains of thought' (RS6)	1 per student												•						
'Chains of thought' (RS6), enlarged	1 per class												•						
'Making switches' (RS7)	1 per team member																		
'Making switches' (RS7), enlarged	1 per class																		
'Circuit model planner' (RS8)	1 per team member																		
'Circuit model planner' (RS8), enlarged	1 per class																		
Teaching tools																			
class science journal	1 per class		•	•															
role wristbands or badges for Director, Manager and Speaker	1 set per team		•	•															
student science journal	1 per student		•	•															
team roles chart	1 per class																		
team skills chart	1 per class																		
TWLH chart	1 per class		•	•															
word wall	1 per class		•	•															
Multimedia																			
digital camera <i>optional</i>																			•