

Change detectives equipment list

EQUIPMENT ITEM	QUANTITIES	LESSON	1	2	3	4	5	6	7	
		SESSION	1	2	1	2	1	2		
Equipment and materials										
balloons	4 per team						•			
candles, identical	3 per class							•		
chocolate button, melted	1 per team			•						
chocolate button, non-melted	1 per class			•						
containers, transparent glass or plastic										
– 100mL container	1 per team					•				
– 200mL container	1 per team					•				
equipment to investigate melting an ice cube	1 collection per team			•						
foil tray	1 per class and 1 per team							•		
frozen milk cube, in container	1 per team			•						
funnel	1 per team						•			
glasses, drinking	3 per team									•
heating equipment (eg, electric hot plate, fry pan, stove)	1 per class				•					
ice cubes, 3 in containers	1 set per team			•						
ice pole, frozen in a clear wrapper	1 per class				•					
ice pole, melted in a clear wrapper	1 per class				•					
jars										
– glass (eg, 200mL jar)	1 per class							•		
– different sizes (eg, 100mL, 250mL and 500mL)	4 per team							•		
labelling pen	1 per team						•			
marbles or small beads <i>optional</i>	1 tray per team				•		•			

Change detectives equipment list

EQUIPMENT ITEM	QUANTITIES	LESSON	1	2	3	4	5	6	7
		SESSION	1	2	1	2	1	2	
Equipment and materials (continued)									
masking tape	1 per team					•			
matches	1 per class and 1 per team						•		
measure, cup	1 per team					•			
measure, half cup	1 per team								•
measuring jug, 500mL	1 per class				•				•
measuring spoons	1 set per team								
– 1/2 teaspoon	1 per team				•				
– 1 teaspoon	1 per team					•			
'Mess scene' equipment	1 collection per class	•							
– burning candle		•							
– burnt chocolate		•							
– frozen milk in the carton		•							
– glass full of bubbles from bicarbonate and tartaric acid reacting together in water, with a packet of sodium bicarbonate and tartaric acid next to it		•							
– glass with a fizzing tablet (eg, antacid tablets)		•							
– ice poles melted in their clear wrappers		•							
– melted chocolate		•							
– open salt container fallen in a bucket of water		•							
– perfume bottle tipped over (or vinegar if students have allergies)		•							
milk, 1 glass	1 per class		•						
paper, A3 sheet or butcher's	1 per team							•	
paper towel	2 pieces per team					•	•		

Change detectives equipment list

EQUIPMENT ITEM	QUANTITIES	LESSON	1	2	3	4	5	6	7	
		SESSION	1	2	1	2	1	2		
Equipment and materials (continued)										
perfume, vinegar or essence, small bottle	1 per class				•					
plastic sheet (eg, overhead transparency)	1 per class				•					
props for particle representations (eg, marbles or labels)	1 set per team			•	•					
salt dough or sand, small quantity	1 per team						•			
resource sheets										
– ‘Salt dissolving table’ (RS1), enlarged	1 per class					•				
– ‘Salt dissolving table’ (RS1)	1 per team					•				
– ‘Fizzing investigation’ (RS2), enlarged	1 per class						•			
– ‘Fizzing investigation’ (RS2)	1 per team						•			
– ‘Changes card sort’ (RS3), enlarged	1 per class							•		
– ‘Changes card sort’ (RS3)	1 per team							•		
– ‘Tablet investigation planner’ (RS4), enlarged	1 per class								•	
– ‘Tablet investigation planner’ (RS4), A4 or A3 sized	1 per student								•	
rope, 1 length	1 per team			•						
salt	3 tablespoons per team					•				
sodium bicarbonate	6 teaspoons per team						•			
spoon	1 per team									•
straw	1 per class				•					
tablet, fizzy	1 per class and 3 per team									•
tartaric acid	6 teaspoons per team						•			
tea candle	1 per class and 4 per team							•		

Change detectives equipment list

EQUIPMENT ITEM	QUANTITIES	LESSON	1	2	2	3	4	5	6	7	
		SESSION	1	2	1	2		1	2		
Equipment and materials (continued)											
water											
– 10mL	1 per team				•						
– 1 glass	1 per class				•					•	
– 300mL	1 per team					•					
– 3 cups, non-acidic	1 per team						•				
– hot, enough to fill a plastic cup	1 quantity per team									•	
– ice-cold, enough to fill a plastic cup	1 quantity per team									•	
– room temperature, enough to fill a plastic cup	1 quantity per team									•	
wax, on a metal skewer	1 per class							•			
wick, 1 length	1 per class							•			
Teaching tools											
class science journal	1 per class		•	•	•	•	•	•	•	•	•
cooperative learning role badges	1 set per team		•	•		•	•	•	•	•	
cooperative learning team roles chart	1 per class										
cooperative learning team skills chart	1 per class										
student science journal	1 per student		•	•	•	•	•	•	•	•	•
word wall	1 per class		•	•	•	•	•	•	•	•	•
Multimedia											
digital camera <i>optional</i>	1 per class		•					•			