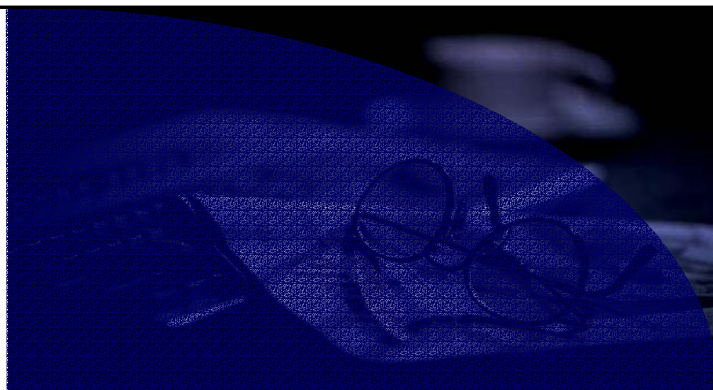


assessment for learning  
year 7...mark scheme



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## 7H Solutions...mark scheme

### Assessment for learning...year 7 (level 3-6)

#### Question 1:

- (a) solution 1  
*accept 'mixture'*
- 
- (b) 210.5 1
- 
- (c) heat the solution **or** warm the water **or** leave it to evaporate 1  
*accept 'boil it' or 'heat it'*  
*accept 'distil it'*
- to dryness **or** until all the water is gone 1  
*accept 'until the water gone'*  
*accept 'distil off water to leave salt behind' or 'evaporate all the water' for both marks*

[4]

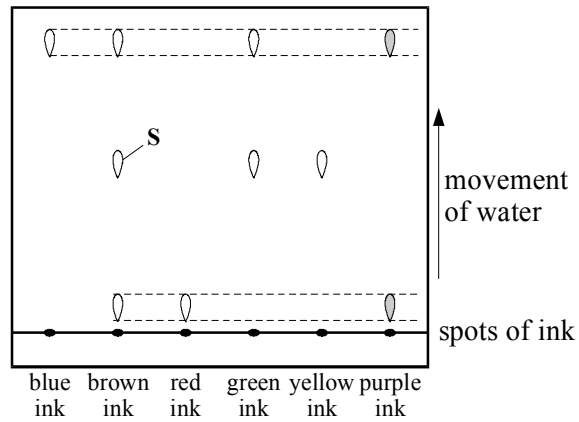
#### Question 2:

- (a) (i) any **one** from 1  
• blue  
• red  
• yellow
- (ii) brown 1

- (iii) spots at the top and bottom corresponding to the red and blue positions

1

*the centres of the spots must lie within the limits shown*



- (b) yellow

[4]

1

**Question 3:**

- (a) C

1

- (b) (i) any **one** from
- to keep the volume of liquid the same
  - for a fair test
  - so the amount of water **or** tea stays the same

1

- (ii) any **one** from
- pipette
  - syringe
  - measuring cylinder

1

*accept 'measuring spoon'  
do **not** accept 'teaspoon'*

- (iii) stir it faster

1

*answers may be in either order*

*accept 'squeeze the tea bag'*

use hotter **or** warmer water **or** use boiling water

1

*accept 'hot water' or 'higher temperature'*

*do **not** accept 'use more water'*

[5]

**Question 4:**

- (a) any **one** from
- it goes up as the temperature rises

1

*do not accept 'it goes up'*

- more dissolves at higher temperatures
- it goes down as it gets colder

- (b) (i) 41 1  
(ii) 73 1  
(iii) 20 1

- (c) water freezes at 0°C **or** ice is formed at 0°C 1

*answers may be in either order*

*accept 'water freezes below 0°C or 0°C is the freezing point'*

*do not accept 'because that is the freezing point'*

- water boils **or** becomes a gas at 100°C 1

*accept 'water boils above 100°C or '100°C is the boiling point'*

*do not accept 'because that is the boiling point' or 'water evaporates at 100°C'*

*accept 'water is a liquid only between 0°C and 100°C for both marks*

*accept 'these are the freezing and boiling points of water' for both marks*

**[6]**

**Question 5:**

- (a) copper oxide 1

- (b) compound ✓ 1

*if more than one box is ticked, award no mark*

- (c) (i) less solution **or** liquid **or** water 1

*answers may be in either order*

*accept 'no liquid' **or** 'the liquid had gone' **or** 'liquid had evaporated'*

- crystals formed 1

*accept 'solid copper sulphate formed' **or** 'a blue solid appeared'*

(ii) any **one** from 1

- there would be more of the solution left

*accept 'the solution would still be there'*

- there would be fewer crystals

*accept 'no crystals'*

*accept 'no change in dish B'*

any **one** from

1

- it prevented the evaporation

*accept 'it stopped the water leaving the dish'*

- less water would have evaporated **or** gone

**[6]**