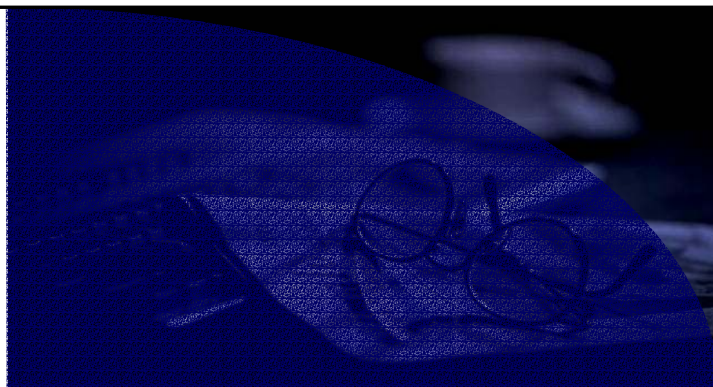


assessment for learning  
year 7...mark scheme



Science Interactive LTD. PO BOX 50764 LONDON NW6 9AT

web: [www: science-interactive.co.uk](http://www.science-interactive.co.uk)

## 7E Acids and alkalis...mark scheme

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

#### Question 1:

a) 4

substance	acidic	neutral	alkaline
orange juice	*✓		
egg white			*✓
oven cleaner			*✓
milk	*✓		

*if more than one box is ticked in any row award  
no mark for that row*

*do **not** accept a tick in 'neutral'*

(b) oven cleaner 1

(c) pH7 1

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

**[6]**

#### Question 2:

(a) It is an acid ✓ 1

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

(b) bubbling 1

*accept 'fizzing' or 'froth' or 'effervescence' or  
'gas given off'  
or 'carbon dioxide given off'  
do not accept 'a reaction'*

- (c) (i) red **or** bright red 1  
(ii) indicators 1
- (d) (i) acid can be poisonous **or** burn **or** is dangerous **or** harmful 1  
*accept 'it makes you ill' or 'it is corrosive'  
or 'because it might be acid'  
do not accept 'it will kill you'*
- (ii) **the answer should refer to the use of washing soda crystals with both liquids**  
any **one** from 1  
  - pour some of the liquid from each bottle onto the washing soda
  - add washing soda to a sample from each bottle  
*do not accept 'add washing soda to each bottle'*
- any **one** from 1  
  - one bubbles and one does not  
*accept 'one of them bubbles'*
  - one gives off carbon dioxide and one does not  
*accept 'one of them gives off carbon dioxide'*
  - the acid bubbles **or** gives off carbon dioxide  
*do not accept 'it bubbles' or 'it gives off carbon dioxide'*
  - the water does **not** bubble **or** give off carbon dioxide

[7]

**Question 3:**

- (a) (i) hydrogen chloride 1  
(ii) oxygen 1
- (b) less gas will dissolve 1  
*accept 'it gets less' or 'lowers it'  
do not accept 'it dissolves less quickly'*
- (c) (i) any **one** from 1  
  - carbon dioxide  
*accept 'CO<sub>2</sub>'*

- hydrogen chloride  
*accept 'HCl'*

(ii) ammonia 1  
*accept 'NH<sub>3</sub>'*

(iii) oxygen 1  
*accept 'O<sub>2</sub>'*  
*do not accept 'O'*

**[6]**

**Question 4:**

(a) irritant 1

(b) (i) bubbles 1

*accept 'froth' or 'fizzing' or 'foam' or 'effervescence'*  
*do not accept 'there is gas in the liquid'*  
*do not accept 'smoke' or 'mist' or any answer referring to what is happening above the liquid*

(ii) wash his hand 1

*accept 'wash it off' or 'rinse with water'*  
*or 'put it in water' or 'wash with soap'*

**[3]**

**Question 5:**

(a) C 1

(b) (i) A or D 1

(ii) B or E 1

(c) neutralisation 1

**[4]**