

Food and digestion/respiration

8A & 8B

36 min
38 marks

2. (a) bubbles are formed

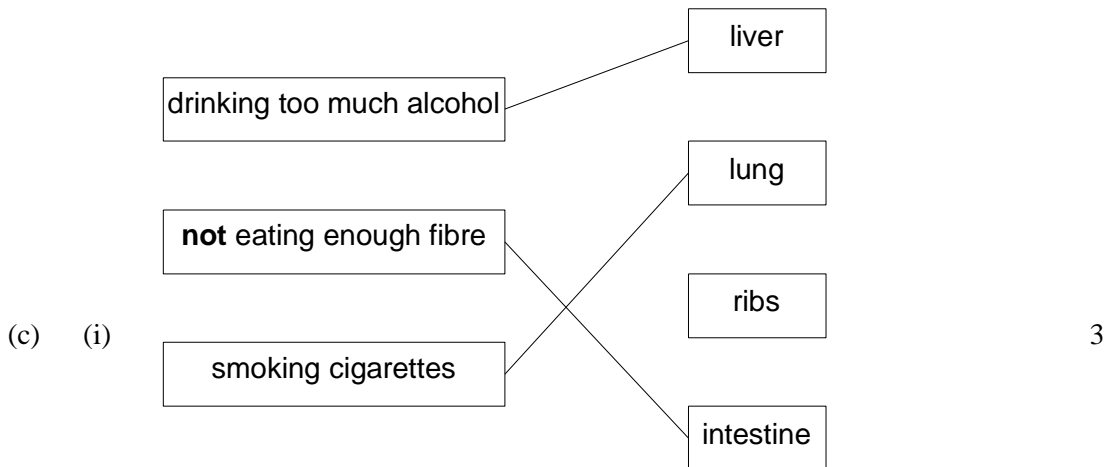
accept 'fizzing'
accept 'effervescence'

1

- (b) (i) It does **not** dissolve in the water. ✓ 1
*if more than one box is ticked,
award no mark*
- (ii) it goes down 1
do not accept 'it goes up the test-tube'
- (c) (i) oxygen 1
- (ii) water vapour 1
*accept 'water' or 'steam'
do not accept 'condensation'*

[5]

3. (a) stomach *and* intestine 1
*answers may be in either order
both answers are required for the mark
accept 'oesophagus' or 'gullet'*
- (b) any **two** from 2
- to make it easy to swallow *accept 'so that it will go down easily'*
 - to digest food or break it down *accept 'to stop you choking'*
 - to soften the food *accept 'to break it into smaller pieces'*
 - accept 'it dissolves it'*



*award one mark for each correct line
if more than one line is drawn from any
habit, award no mark for that habit*

- (ii) heart ✓ 1
*if more than one box is ticked,
award no mark*

[7]

4. (a) (i) oxygen and carbon dioxide 1
- (ii) smaller surface area 1
*answers may be in either order
both are required for the mark
accept 'O₂ and CO₂'
accept 'nitrogen' instead of oxygen and
carbon dioxide
do not accept 'smaller'*

- (b) (i) nicotine 1
(ii) tar 1
(iii) carbon monoxide 1

[5]

5. (a) any **one** from 1
- the test-tube is pointing away from him
accept 'the test-tube is pointing away from the edge of the bench'
do not accept 'the test-tube is at an angle'
 - he used a cork and a pin to hold the burning crispbread
accept 'he used a pin' or 'he is not holding the crispbread'
or 'the cork is on the stand'
 - the test-tube is held in a clamp
accept 'he used a clamp' or 'the test-tube is held tightly'
 - it is away from the edge of the bench
 - the apparatus is arranged over the base of the stand for stability
accept 'the tube is over the base'
do not accept 'he is wearing goggles'
- (b) any **two** from 2
- use the same amount of water
 - use the same mass **or** weight of crisp
accept 'use the same mass of food'
do not accept 'use the same amount of food'
 - the crisp must be the same distance from the test tube as the crispbread was
 - start with water at the same temperature
 - shield both experiments from the draught
do not accept 'use the same apparatus' or 'heat for the same amount of time'
- (c) The change in the temperature of the water will be greater. ✓ 1
if more than one box is ticked, award no mark
- (d) (i) fibre is not digested 1
accept 'it is not absorbed'
or 'it does not get broken down'
do not accept 'it is insoluble'
- (ii) any **two** from 2
- it contains less fat
accept 'it is less fattening'
or 'it contains less energy'
 - it contains more fibre
 - it contains more protein
do not accept 'more carbohydrate'
- (e) oranges ✓ 1
if more than one box is ticked, award no mark

[8]

