



8A Food and digestion...mark scheme

Assessment for learning...year 8 (level 3-6)

Question 1:

- (a) (i) the uterus **or** womb 1
(ii) the lung **or** lungs 1
do not accept 'air sac'
- (b) transport of blood **or** correctly named substance in the blood 1
*accept 'moves **or** circulates blood'*
*accept 'defence against disease' **or** 'helps regulate body temperature'*
- digestive **or** digestion 1
*do not accept 'gut' **or** 'intestines'*
- (c) any **one** from 1
- gives support
 - gives shape
 - protects internal organs
 - allows movement
 - anchorage **or** attachment for muscles
 - produces blood cells

[5]

Question 2:

- (a) digestive system ✓ 1
if more than one box is ticked, award no mark
- (b) lowest box ticked 1
if more than one box is ticked, award no mark

[2]

Question 3:

- (a) any **one** from 1
- vitamins
 - minerals
- accept a named vitamin eg. vitamin C*
- accept a named mineral eg. iron **or** calcium **or** salt*
- do **not** accept 'water'*
- (b) (i) haricot beans 1
- accept 'beans'*
- (ii) any **one** from 1
- for growth
- accept 'for muscles **or** hair **or** nails'*
- for repair
- accept 'for healing wounds'*
- for replacement of cells
- accept making any named protein eg haemoglobin*
- for making proteins
- accept 'for making enzymes **or** antibodies*
- (c) (i) any **one** from 1
- haricot beans *accept 'beans*
 - tomato puree *accept 'tomatoes'*
- accept 'spices **or** 'paprika' **or** 'onion powder'*
- (ii) any **one** from 1
- it helps the passage of food through the gut
- accept 'it keeps the food moving'*
- it prevents constipation
- accept 'it helps you go to the toilet' **or** it makes you feel full'*
- do **not** accept 'it helps fill you up' **or** 'it makes you feel full'*

[5]

Question 4:

- (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
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- (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]

Question 5:

- (a) any **one** from 1
- amylase is denatured **or** destroyed
 - enzymes work best at the right pH

accept 'enzymes only work at the right pH'

do not accept 'enzymes do not work at this pH'

do not accept 'amylase does not work at this pH'

do not accept 'amylase is killed at that pH'

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|-----|------|--|---|---|
| (b) | (i) | an alkali | <i>accept 'strongly or weakly alkaline'</i> | 1 |
| | (ii) | neutralisation | <i>do not accept 'digestion'</i> | 1 |
| (c) | (i) | any one from | | 1 |
| | | • blood sugar level does not rise as high after eating pasta | <i>accept 'blood sugar is lower'</i> | |
| | | | <i>do not accept 'there is not as much starch in pasta'</i> | |
| | | • amount of insulin produced is related to the blood sugar level | | |
| | (ii) | 0.9 mg/cm ³ | <i>accept answers from 0.8 mg/cm³ to 1.0 mg/cm³ the unit is required for the mark</i> | 1 |

[5]