

Health and Disease

Q:1 List A gives the names of four drugs which affect the body.

List B gives information about substances which affect the body.

Draw a straight line from each drug in List A to its information in List B.

List A Drugs	List B Information
Alcohol	The addictive substance in tobacco smoke
Cocaine	Deprives a fetus of oxygen, leading to low birth mass
Nicotine	A very addictive drug, sold illegally in the UK
Thalidomide	Drug which caused many children to be born with abnormal limbs
	Affects the nervous system by slowing down reactions

(4 marks)

Q:2 Health is affected by diet and exercise.

(a) List A gives the names of three conditions which affect the body. List B gives information about these conditions.

Draw a straight line from each condition in List A to the information about it in List B.

List A – Condition

List B – Information

High blood cholesterol level

Linked to lack of food

Arthritis

Linked to eating too much saturated fat

Reduced resistance to infection

Linked to too much salt in the diet

Linked to too much weight acting on the joints

(3 marks)

(b) Give two reasons why exercise is good for us.

1. _____

2. _____

(2 marks)

Q:3 Nicotine is the addictive substance in tobacco.

People can be helped to stop smoking by giving them nicotine replacement therapy (NRT). The table gives the results of trials of different types of NRT.

Type of NRT	Smokers given NRT		Smokers given placebo	
	Number of smokers in trial	Percentage of smokers who gave up smoking	Number of smokers in trial	Percentage of smokers who gave up smoking
Gum	7387	20	9319	12
Patch	7708	14	5969	8
Nasal spray	448	24	439	12
Inhaler	490	14	486	8
Tablet	243	20	245	13

(a)(i) What is a placebo?

(1 mark)

(a)(ii) Why was a placebo used in these NRT trials?

(1 mark)

(b)(i) In which trial was the data most reliable?

(1 mark)

(b)(ii) Give the reason for your answer.

(1 mark)

(c)(i) Which type of NRT was most effective?

(1 mark)

(c)(ii) Explain the reasons for your answer.

(2 marks)

Q:4 The photograph shows teenagers enjoying burgers and cola at a party.



(a) Which part of the body contains receptors which enable a teenager to:

(a)(i) see the burgers

(1 mark)

(a)(ii) smell the burgers

(1 mark)

(a) (iii) taste the burgers?

(1 mark)

(b)(i) A teenager drinks a can of sugary cola every day. After a year, he is likely to be 6 kg heavier than a similar teenager who drinks low-sugar cola.

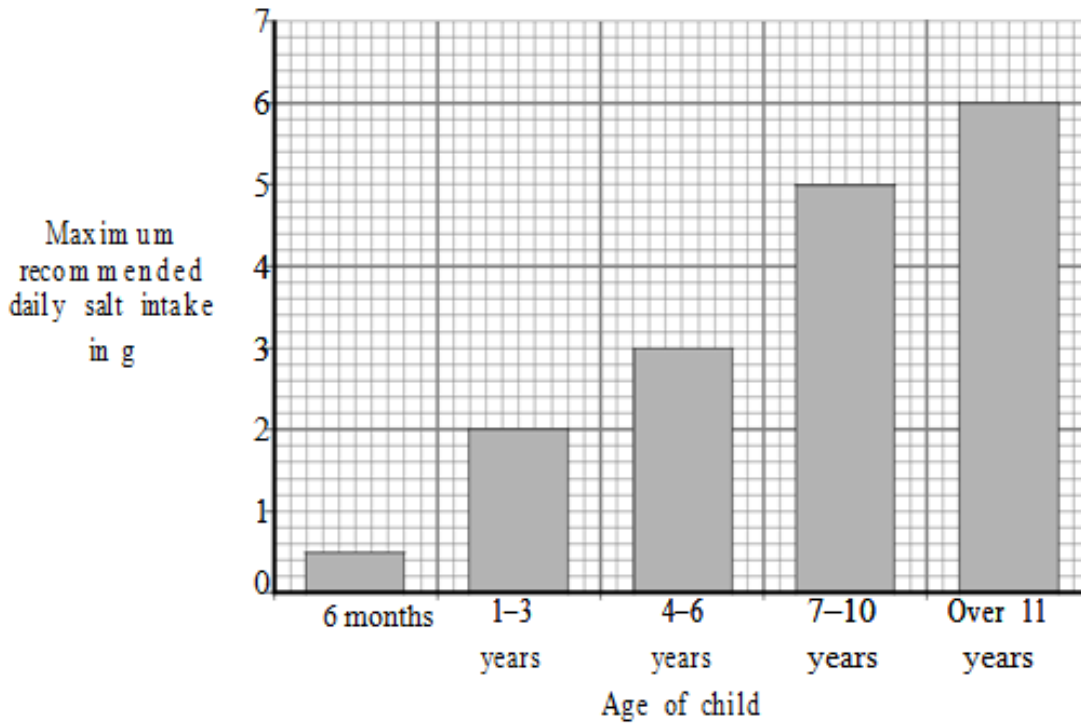
Give one reason why.

(1 mark)

(b)(ii) Name one disease linked to obesity.

(1 mark)

(c) The graph shows the maximum recommended daily salt intake for children of different ages.



(c)(i) What is the maximum recommended daily salt intake for a 6 month-old child?

_____ g

(1 mark)

(c)(ii) A 6 year-old child has burger, beans and crisps for lunch.

The table shows the mass of salt in each of these foods.

Food	Mass of salt in g
Burger	0.8
Beans	0.9
Crisps	1.4

How much more salt has the 6 year-old child eaten than the maximum recommended daily mass?

Show clearly how you work out your answer.

_____ g

(2 marks)

(c)(iii) Name one health problem linked to too much salt in the diet.

(1 mark)

Q:5 Scientists estimate that about one third of cancers in the UK may be linked to obesity.

(a) Name two diseases linked to obesity.

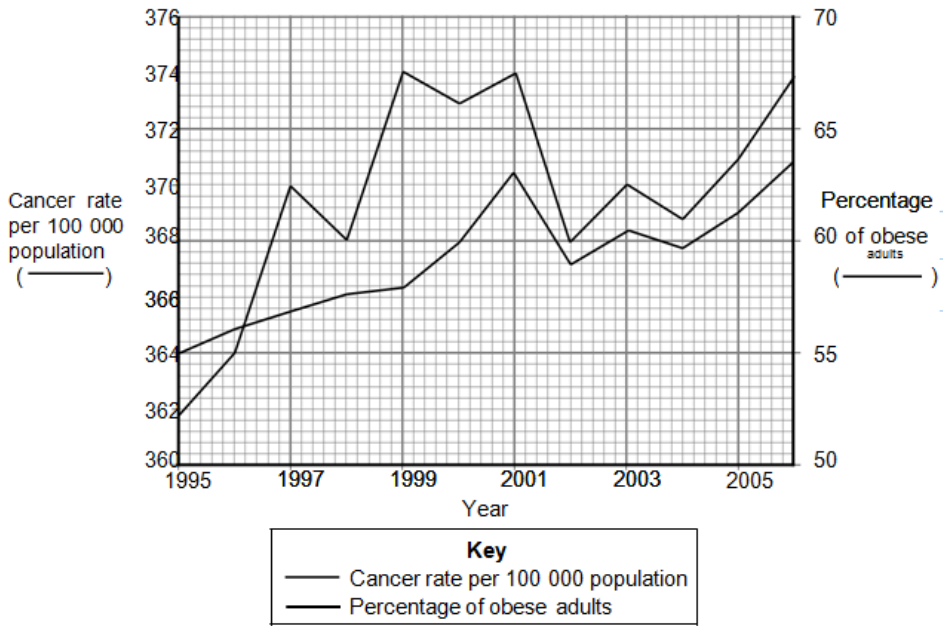
Do not give cancer as one of your answers.

1 _____

2 _____

(2 marks)

The graph shows the changes in the cancer rate and the changes in the percentage of obese adults in the UK from 1995 to 2006.



(b) Does the data in the graph prove that obesity causes cancer?

Draw a ring round your answer. Yes / No

Explain the reason for your answer.

(2 marks)

(c) Exercise helps a person to lose weight.

Explain why.

(2 marks)

TOTAL MARKS=32