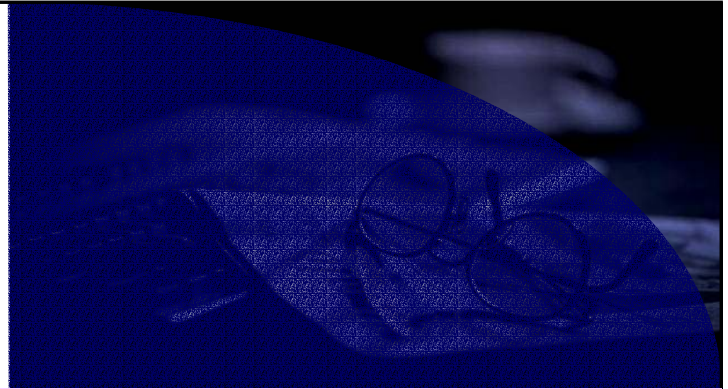


assessment for learning

year 8...mark scheme



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8C Microbes and disease...mark scheme

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

Question 1:

- (a) (i) 1950 and 1955 1
both dates are required for the mark
accept the dates in reverse order
accept '1945 and 1955'
do not accept '1945 and 1950'
- (ii) tar 1
accept a named recognised carcinogen
accept 'carbon particles'
do not accept 'nicotine' or 'carbon monoxide'
if both tar and nicotine are given award no mark
- (b) any **one** from 1
 - immunisation *accept 'inoculation'*
 - vaccination *do not accept 'injection'*
 - BCG *accept 'TB jab'*
 - BCG injection *do not accept 'jab'*
 - BCG jab *do not accept 'shot'*
 - BCG shot *do not accept 'medicine'*
- [3]**

Question 2:

- (a) any **one** from 1

- bacteria
- viruses
- fungi

do not accept 'germs' or 'microbes'

- (b) (i) to stop micro-organisms passing from Michael to the first-aider 1
accept 'bacteria' or 'viruses' or 'fungi'
or 'microbes' or 'germs' for micro-organisms
accept 'to stop blood getting on the first-aider'
- (ii) to stop micro-organisms passing from the first-aider's hands to the cut 1
 or to Michael
accept 'bacteria' or 'viruses' or 'fungi' or
'microbes' or 'germs' for micro-organisms
accept 'rubber gloves are sterile or cleaner than
hands'
accept 'to prevent the spread of infection or HIV
or AIDS' as an alternative to one of the answers
only

[3]

Question 3:

- (a) (i) any **one** from 1
 - resistant to disease
accept 'having antibodies against the disease'
 - will not catch the disease
do not accept 'able to fight the disease'
- (ii) antibodies 1
accept 'antitoxins'
- (iii) any **one** from 1
 - dead bacteria or virus or micro-organism
 - weakened bacteria or virus or micro-organism
 - non-virulent strain of bacteria
 - mild strain of virus
 - antigens
- (b) any **one** from 1
 - antibodies pass to baby via placenta
 - antibodies pass to baby via breast milk
accept 'through the placenta'
accept 'through mother's milk'

do not accept 'antibodies passed to baby through milk'

- (c) any **one** from 1
- it goes down and stays down
accept 'it goes down'
 - continues downwards
 - fewer people got measles after 1967
- (d) it will increase **or** return to the pre-1967 levels 1
- [6]**

Question 4:

- (a) 37°C 1
- if more than one box is ticked, award no mark*
- (b) the lotion killed the bacteria 1
- accept 'they died' or 'they were killed or destroyed'*
- (c) the paper disc soaked in water 1
- accept 'the other disc'*
- (d) any **two** from 2
- keep the lid on the dish
 - seal **or** secure the dish
 - wear gloves
 - wear a mask **or** goggles
 - use tweezers to add the paper disc
- do not accept 'do the experiment in a fume cupboard'*
- [5]**

Question 5:

- (a) any **one** from 1
- there were not enough bacteria in the food **or** body
accept 'the bacteria had to grow first'
 - the bacteria multiplied by the next day
- (b) the antibiotic **or** medicine killed all the bacteria 1
- accept 'the antibiotics got rid of all the bacteria' or 'there were no bacteria left'*

(c) any **one** from 1

- antibiotic **or** medicine had not killed all the bacteria

accept 'not all the bacteria had gone'

- there were still bacteria left alive
- the bacteria multiplied

1

accept 'the population rose again'

accept 'they could grow again'

accept 'they reproduced again'

(d) any **one** from 1

- it slows down reproduction

accept 'it stops them reproducing' or 'it stops them breeding' or 'it stops them multiplying'

- it is too cold for the bacteria to divide **or** reproduce

accept 'it stops them growing'

accept 'slows down growth'

*do **not** accept 'they are dormant'*

*do **not** accept 'it freezes them'*

[5]