



## 9B Fit and healthy...mark scheme

### Assessment for learning...year 9 (level 3-6)

#### Question 1:

- (a) **answers should show an understanding that the bricklayer does physical work**

more active

1

*accept 'uses up more energy' or 'lifts bricks all day' or 'does more work'*

*do not accept 'works harder' or 'has a tougher job' or 'does hard work'*

- (b) **answers should refer to bones and their growth**

calcium is needed for bone

1

*accept 'it is needed for teeth'*

the 15-year olds are still growing

1

*accept 'the adults have stopped growing'*

- (c) any **one** from

1

- girls menstruate

*accept 'girls have periods'*

- to replace blood lost by menstruation

*do not accept 'iron is needed to produce red blood cells'*

*do not accept 'growth spurts'*

- (d) carrot

1

milk

1

chicken

1

[7]

**Question 2:**

- (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 3:**

- (a) dilates **or** gets wider 1  
*accept 'gets bigger' or 'expands' or 'opens up'*  
*do not accept 'makes the lining go down'*
- allows more air to enter lungs **or** lets carbon dioxide leave lungs more easily 1  
*accept 'lets more air or oxygen or carbon dioxide through'*  
*or 'air can get in and out more easily'*  
*do not accept 'more air or oxygen' or 'easier to breathe' or makes it clearer'*
- (b) relaxes it 1  
*accept 'stops it contracting' or 'decontracts' or 'makes it go back to its original or normal size'*  
*do not accept 'expands it' or 'stretches it'*

[3]

**Question 4:**

- (a) (i) it pulls the leg **or** the femur outwards **or** to the side 1  
*accept 'it lifts the leg outwards or to the side' or 'the leg swings to the side or outward's*  
*do **not** accept 'it lifts the leg' or 'it pulls the leg upwards'*
- (ii) C and F 1  
*letters may be in either order*  
***both** letters are required for the mark*
- (iii) any **one** from 1
- it allows controlled **or** slow movements  
*accept 'so that movements are not jerky' **or** 'the relaxed muscle provides resistance to movement'*
  - it allows small movements  
*accept 'the partially relaxed muscle holds the limb in position'*  
*accept 'if they relaxed completely the person would fall over'*  
***or** 'it allows more rapid responses'*
- (b) (i) cartilage 1
- (ii) any **two** from 2
- ends of bones will rub against each other **or** become worn  
*accept 'there will be friction at the joint'*  
*do **not** accept 'the bones will hit each other'*
  - less smooth movement in the joint **or** stiffness in the joint  
*accept 'harder to move'*
  - inflammation **or** swelling  
*do **not** accept 'pain'*
- (c) (i) to allow the arm to bend **or** move at the joint 1  
*accept 'to allow the arm to move'*  
*accept 'so they do **not** snap when the arm bends'*  
***or** 'they need to be different lengths when the joint moves'*  
*do **not** accept 'to allow bones to bend'*
- (ii) if they stretched they would not pull as much on the bones 1  
*accept 'they would have less effect on bones' **or** 'controlled movement would not be possible' **or** 'they would not pull as much'*

do **not** accept 'they would not pull on the bone'  
**or** 'they would not hold bones'

[8]

**Question 5:**

- (a) Q 1  
*accept '1941 – 47'*
- (b) It affects the nervous system. ✓ 1  
*if more than **one** box is ticked, award no mark*
- (c) (i) the chance of having an accident increases 1  
*accept 'it increases' **or** 'you are more likely to have an accident if you drink **or** are drunk'*
- the rate of increase gets faster the more alcohol is in the blood 1  
*accept 'the rate gets faster'  
**or** 'the graph gets steeper the more you drink'*
- (ii) Alcohol increases the time a person takes to react. ✓ 1  
*if more than one box is ticked, award no mark*

[5]