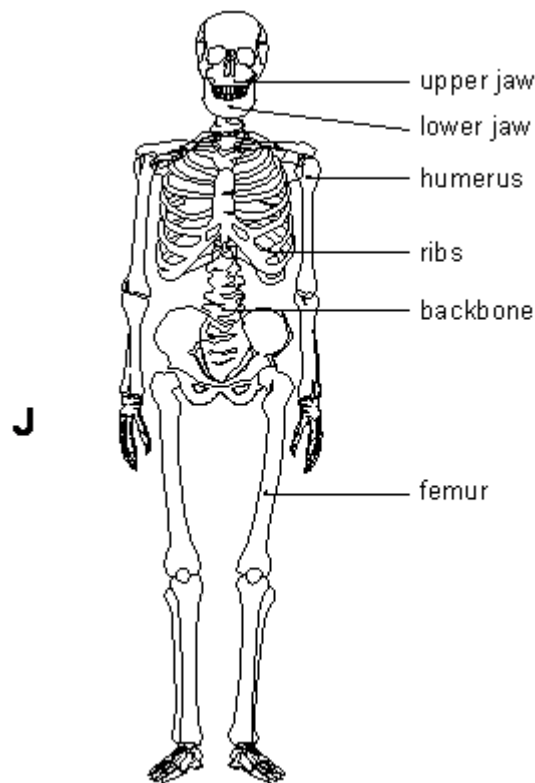


Q1.

The diagram below shows the human skeleton.



- (a) (i) Draw a line from the letter **J** to **one** joint in the leg.

1 mark

- (ii) Why do we need joints in our skeleton?

.....
.....

1 mark

- (b) (i) Which part of our skeleton, labelled in the diagram, moves so that we can breathe?

.....

1 mark

- (ii) Which part of our skeleton, labelled in the diagram, moves so that we can chew food?

.....

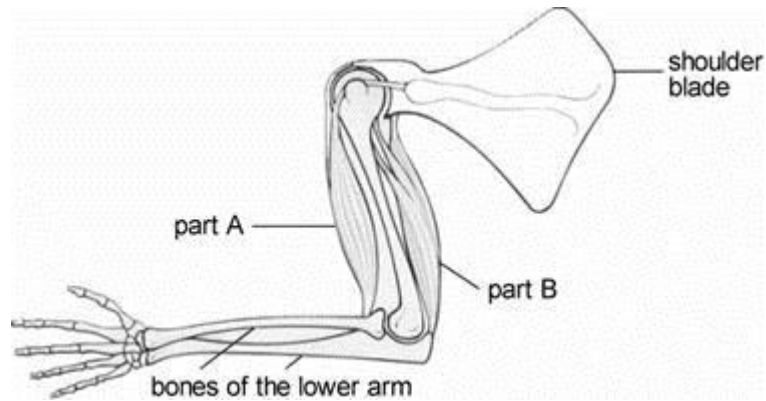
1 mark

- (c) Which **one** of the following is needed in the diet for strong bones and teeth?
Tick the correct box.

aluminium		copper	
calcium		iron	

1 mark

(d) The diagram below shows part of the arm.



(i) Parts A and B are attached to bones. What name is given to parts of the body like parts A and B?

.....

1 mark

(ii) Part A gets shorter. In which direction does the lower arm move?

.....

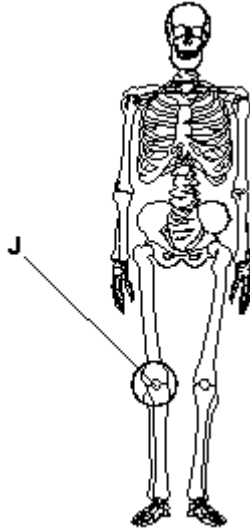
1 mark

Maximum 7 marks

Mark schemes

Q1.

- (a) (i) a line drawn from the letter **J** to any joint in a leg
the mark may be awarded if lines are drawn to more than one joint in the leg



accept a line to a knee, ending within the limits shown
accept a line to a hip or ankle or any joint in the foot
provided that it ends on the line between two bones
*do **not** accept a letter **J** written over any joint*

1 (L3)

- (ii) any **one** from
- so that we can bend
 - so that we can move
- accept 'so that we can walk'*
*do **not** accept 'so that the bones can bend'*

1 (L3)

- (b) (i) ribs

1 (L4)

- (ii) lower jaw
*do **not** accept 'jaw' or 'upper jaw'*

1 (L3)

- (c) calcium ✓
if more than one box is ticked, award no mark

1 (L4)

- (d) (i) muscles
accept 'biceps and triceps'
or 'muscles and tendons'
*do **not** accept 'muscles and ligaments'*

1 (L4)

(ii) up

accept 'it moves up'

*do **not** accept 'it bends'*

1 (L4)

[7]

Examiner reports

Q1.

The performance on the skeleton question was good. Nearly all pupils were able to identify a joint in the leg and to explain why joints are needed in the skeleton. Joints in the foot were deemed acceptable answers, largely because some South Asian languages use the same word for both *foot* and *leg*. Most pupils successfully identified muscles from a diagram, and which bones move during breathing and chewing. Some pupils associated the jaw bones with breathing or the upper jaw with chewing and had difficulty identifying which way the lower arm would move when the biceps contract.

Questions on digestion were generally well answered in 1998, as they have been in recent years, and questions related to diet were more successfully answered than in previous years. Many pupils knew that calcium is needed for strong bones and teeth, identified that oranges are a good source of vitamin C.