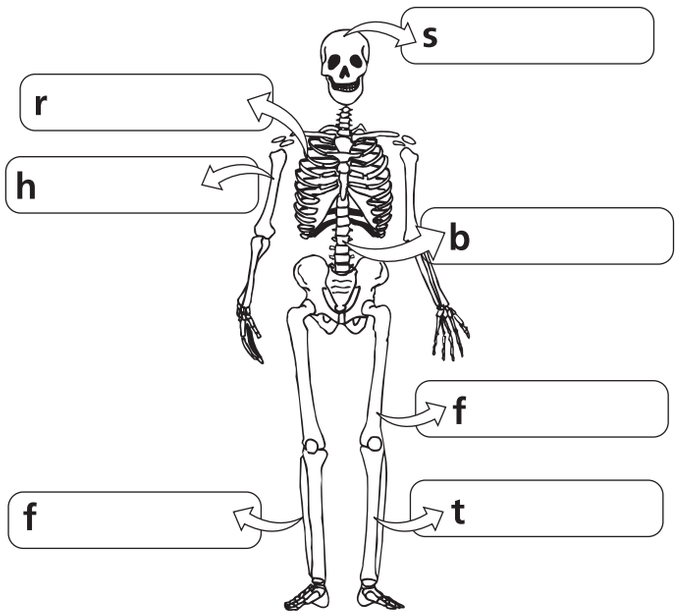
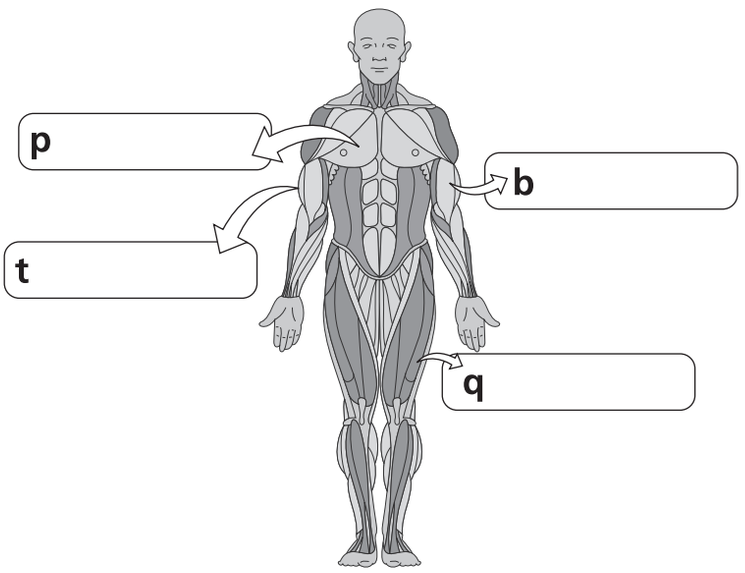
BIOLOGY

The Human Body. Bones, muscles and joints.

1 Label.



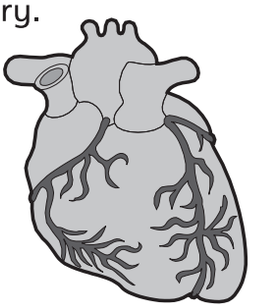


2 Complete the text with the words in the box.

muscles	legs	200	body	triceps	650	jumping

There are more than (1) _____ bones in the human body. The bones form the skeleton. The skeleton supports the body. We have got bones in our head, trunk and limbs. Our arms and legs are limbs. The bone in the head is the **skull**. The bones in the trunk are the **backbone** and the **ribs**. The **humerus** is a bone in the arms. The bones in the (2) _____ are the **femur**, the **tibia** and the **fibula**.

There are about (3) _____ muscles in the human (4) _____. Muscles are for walking, running and (5) _____. Some important muscles are the **biceps**, the (6) _____, the **pectorals**, and the **quadriceps**. Muscles can be voluntary or involuntary.



Voluntary muscles are muscles that we can move when we want, for example, arm and leg muscles.

Involuntary (7) _____ are muscles that we can't control. The **heart** is an involuntary muscle.

3 Read, draw and label.

A joint is where two bones connect. Joints make the skeleton flexible. Some important joints are the elbow, the knee, the ankle, the shoulder, the hip and the wrist.

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TEACHER'S NOTES

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The human body. Bones, muscles and joints.

Aim

- To study human bones, muscles and joints.

Language focus

Key vocabulary: *human body, bone, muscle, joint, trunk, limbs, skeleton, heart, backbone, rib, femur, tibia, fibula, humerus, biceps, triceps, pectorals, quadriceps, voluntary/ involuntary muscles, elbow, knee, ankle, shoulder, hip, wrist.*

Key language: *There are more than 200 bones in the human body. The bones form the skeleton. The skeleton supports the body.*

Materials

- Worksheet.

Warm-up

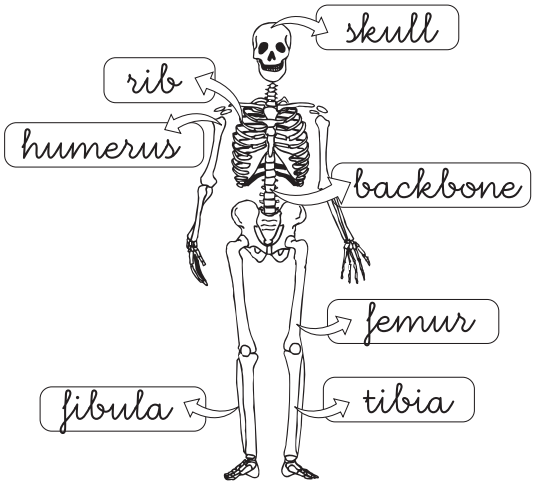
- Write some instructions on the board, eg, *jump, walk, touch your shoulder, touch your knees, clap your hands, touch your head, touch your back, move your arms, touch your elbow.*
- Point to one of the instructions and encourage the pupils to read it and do the action. Continue with the other instructions.

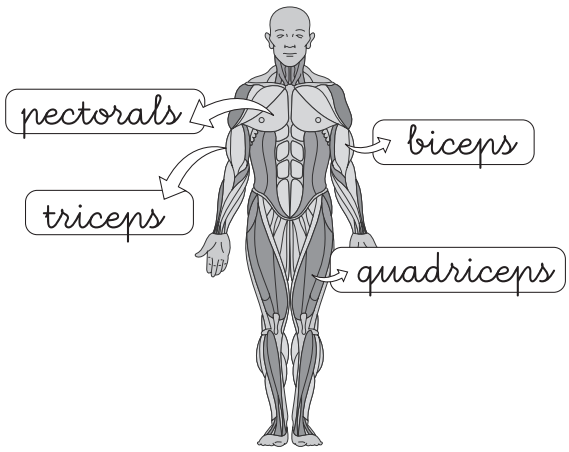
Completing the Worksheet

Activity 1

- Draw an outline of the human body on the board. Elicit body parts and other information by pointing to the picture and asking the pupils questions like *What's this? How many fingers have we got? Is your heart in your arm?* etc.
- Draw some bones in the arms and legs. Elicit or teach *bones*. Draw some muscles or point to your arm muscles. Encourage the pupils to feel their own bones and muscles. Write *bones* and *muscles* on the board.
- Write the names of the different bones and muscles on pieces of sticky paper. Write on the board *The _____ is a _____. It's in the _____*. Bring two pupils to the front of the class. Give one of the pieces of paper to one of them and get him or her to read the word and say whether it is a bone or a muscle and explain where it is using the structure on the board, eg, *The femur is a bone. It's in the leg.* Encourage the pupil to label the other pupil using the paper labels. Ask the class if the bone is in the right place. Invite more pupils to come to the front. Go through the different bones and muscles with the class and explain where they are.
- Ask the pupils to label the picture in Activity 1. Use a picture to check the answers on the board.

Answers:





Activity 2

- Start reading the text with the class and use pictures and simple explanations to explain the new vocabulary. Most of the children will recognize the vocabulary as it is similar to L1. Don't let the pupils write the words at this stage. Encourage them to say what the missing words are. Say the names of the

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bones and muscles a few times and show the pupils where they are in the body.

- The pupils write the words to complete the text.

Answers: **1**-200; **2**-legs; **3**-650; **4**-body; **5**-jumping; **6**-triceps; **7**-muscles

Extension activity

Write some questions about the text on the board (make the questions easier or more challenging depending on the class), eg, *How many bones are there in the human body? Why is the skeleton important? Where is the femur? How many muscles are there in the human body? Why are muscles important? Is the heart a voluntary muscle or an involuntary muscle?* Pupils answer the questions in their notebooks.

Activity 3

- Draw a leg on the board showing the leg bones included in the worksheet (femur, tibia and fibula). Explain that the bones connect at the *knee.* The knee is a *joint.* Write on the board *bones, muscles* and *joints.* Explain that *a joint is where two bones connect. We can move because we have got bones, muscles and joints.* Open and close a door and explain that the joints in our body are like door hinges.
- Elicit the names of other joints from the pupils by pointing to them. Write the joints in Activity 3 on the board and go through them. Play *Simon says* with actions involving the different joints, eg, *(Simon says) move your wrist.*
- The children draw an outline of the human body in their notebooks and label it with the names of the joints mentioned in the text in Activity 3 (*elbow, knee, ankle, shoulder, hip* and *wrist*).

Extension activity

Bring a pupil to the front of the class. Say *knees* and encourage the pupil to move his or her knees. Then ask him/her to name a joint for you to move. Do some more examples. Bring another pupil to the front of the class and encourage the two pupils to continue the activity, taking turns to name a joint. The class can then continue in the same way in pairs.

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