



Science

Animals Including Humans

Mighty Muscles



Aim

- I know why we need muscles to move.
- I can set up a simple practical enquiry.
- I can record my findings.

Success Criteria

- I can explain how muscles allow movement.
- I can identify pairs of muscles in the body.
- I can set up a simple practical enquiry.
- I can make modifications to a simple practical enquiry I have set up.
- I can write an explanation for my findings.
- I can write an explanation linking my findings with general scientific ideas.

Movement

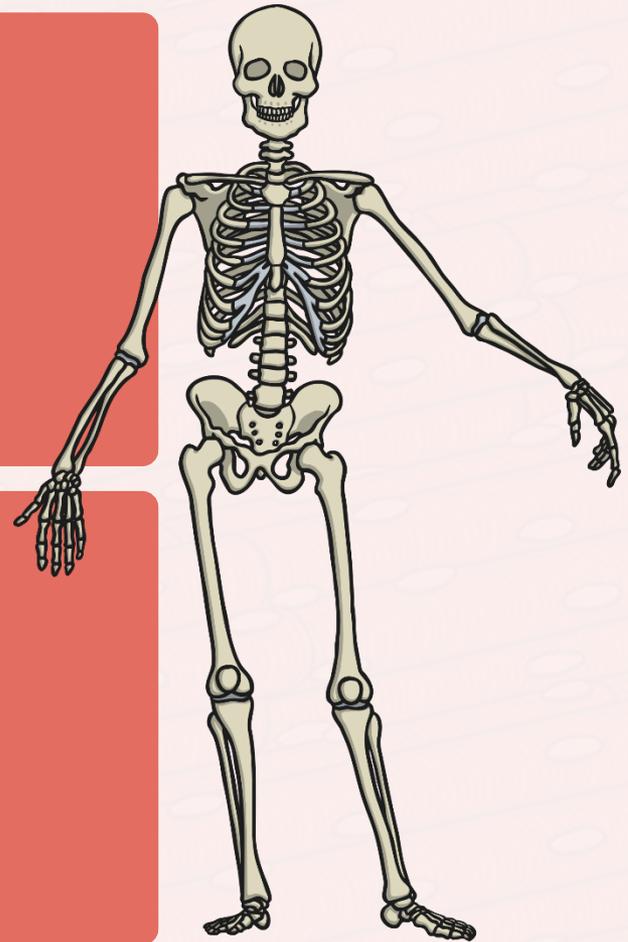


A

B

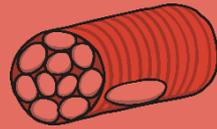
C

D

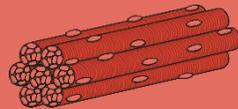


What are Muscles?

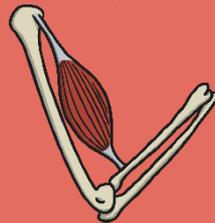
Our bodies are made up of different types of cells



Cells form to make tissue



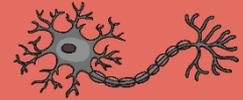
Skeletal muscles are made up of just muscle tissue



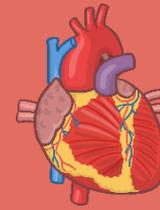
smooth muscle cell



bone cell



nerve cell



Organs are made up of more than one type of tissue

Mighty Muscles



A

C

B

D

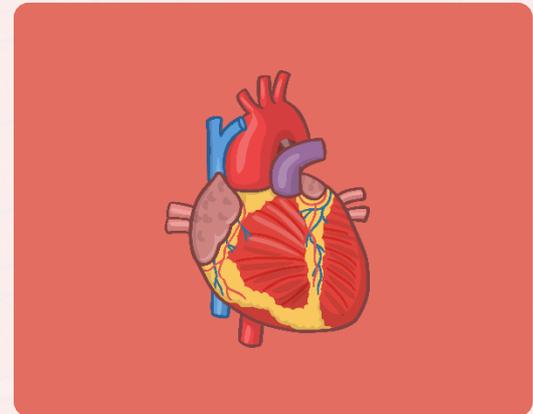
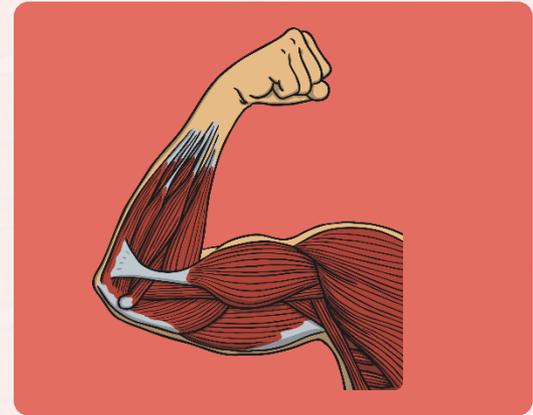
Voluntary and Involuntary



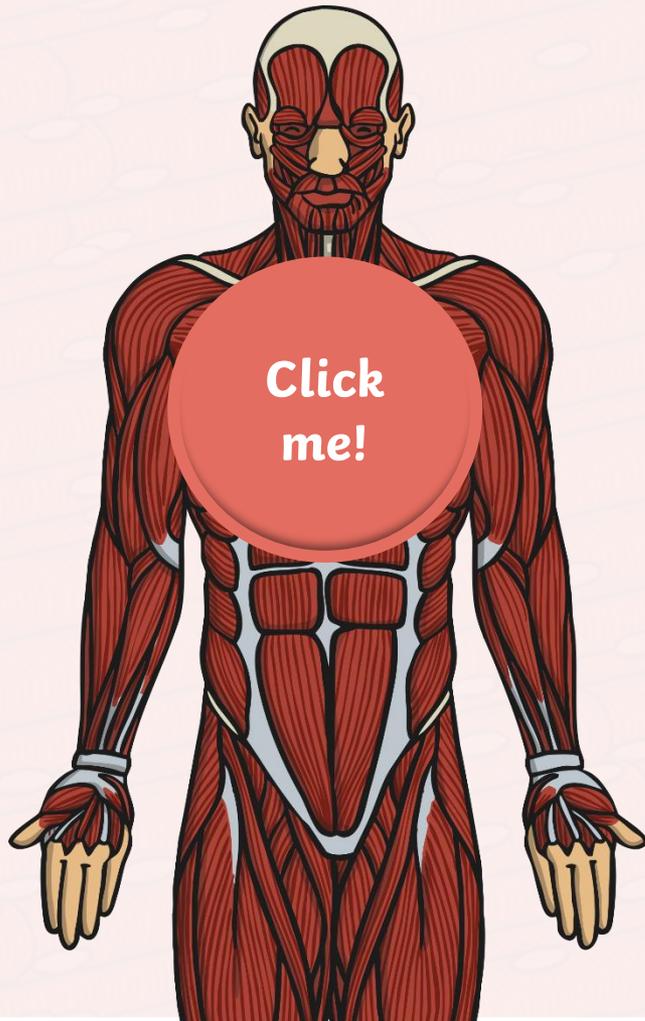
Some muscle movement is voluntary and we can control it. Other muscle movement is involuntary and we don't have control over it.

Look at the pictures to the right:
Which shows voluntary muscle movement and which shows involuntary?

Discuss with your partner and explain why you made your choice.



Two's Company



Click
me!

Watch the following video
and focus on the following:

1

How do muscles
move?

2

What words are used
to describe the
movement?

Move Your Muscles



In groups you are going to do two different activities: You need to predict the muscles you think will be used before the activity. After the activity you will show the results of what you found.

Activity	Prediction (before the activity): Circle or highlight the muscles you <u>think</u> will be used.	Results (after the activity): Circle or highlight the muscles you <u>used</u> .
 An illustration of a young girl with brown hair, wearing a yellow long-sleeved shirt, green leggings, and red sneakers. She is captured in a jumping pose with her arms raised and one leg bent.	 A front-facing anatomical diagram of a human male bodybuilder, showing the skeletal structure and muscle groups in red and white.	 An identical front-facing anatomical diagram of a human male bodybuilder, showing the skeletal structure and muscle groups in red and white.

Muscle Memory

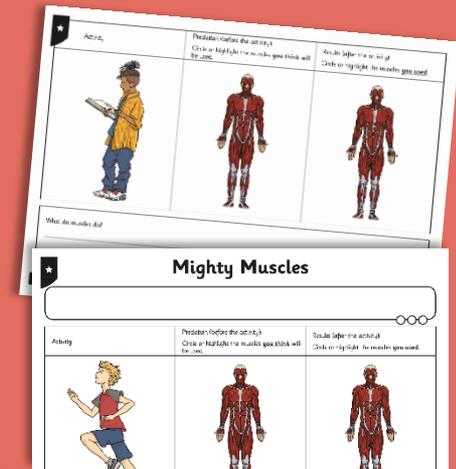


Were your predictions correct? Why? Why not?



What have you learnt in this lesson about muscles?

Complete your Mighty Muscles Activity Sheet.



Remember to use the key vocabulary you have learnt in this lesson.

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