

Unit 4 Interactive PE: From strength to strength

1 Think!

Write down the names of three strong people (real or fictional). What can they do? Tell a partner.

2 Reading

- a Read the text and answer the questions. Then work with a partner and compare your answers.

JIM'S GYM the place to train!

How much do you know about muscles? Do you know the names of muscles A–E?

Read our info* sheet and check your answers. Then do our muscle test and win a month's training at JIM'S GYM!

Muscle in!

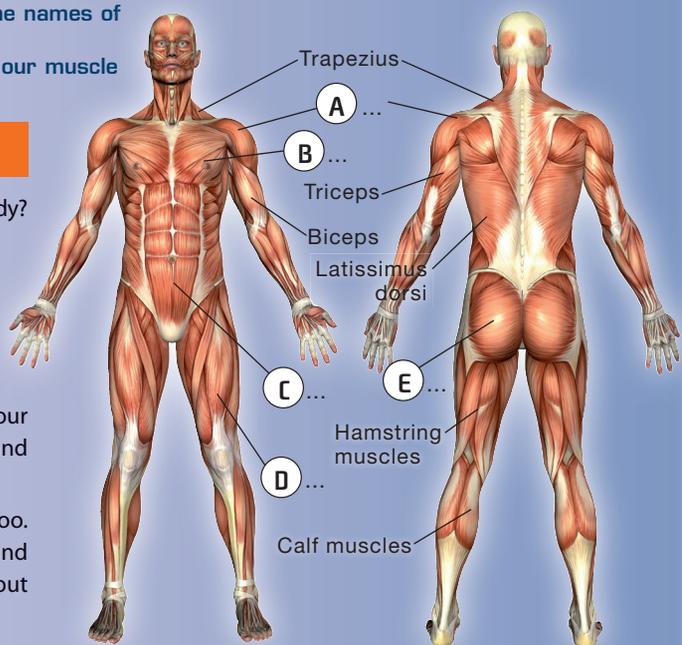
Do you know you have more than 600 muscles in your body? That's 50% of your body weight!

There are three types of muscle: smooth muscle, cardiac muscle and skeletal muscle.

Smooth muscles are involuntary muscles. That means you can't control them — your brain and body tell these muscles what to do. You don't think about it. They work all over your body: for example, in your stomach and oesophagus and behind your eyes.

Cardiac muscles are in your heart. They are involuntary too. They contract and relax to make your blood circulate round your body. This is your heartbeat. Your heart beats about 100,000 times every day, so these muscles work very hard!

Skeletal muscles move and support your skeleton. They are voluntary muscles. You can control them. For example, you tell your leg muscles to kick a ball. Some important skeletal muscles are your deltoids in your shoulders, your pectorals in your chest, your abdominals under your ribs, your biceps in your arms and your quadriceps at the top of your legs. When



you sit down after exercising all these muscles, then you sit on your gluteus maximus: the muscle in your bottom!

Do you want to know more? Do you want to be strong? Then come to Jim's gym, learn about your muscles and exercise them!



The test

Now you've got the facts, do the test!

- 1 Choose the correct answer.
 - a There are over 600/100,000 muscles in your body.
 - b You can control *smooth/skeletal* muscles.
 - c Pectorals are *voluntary/involuntary* muscles.
 - d Your quadriceps are muscles in your *arms/legs*.
- 2 What muscles are the people in the pictures using?

* info = information

3 Speaking

Work with a partner. Choose three sports and discuss the muscles you use.

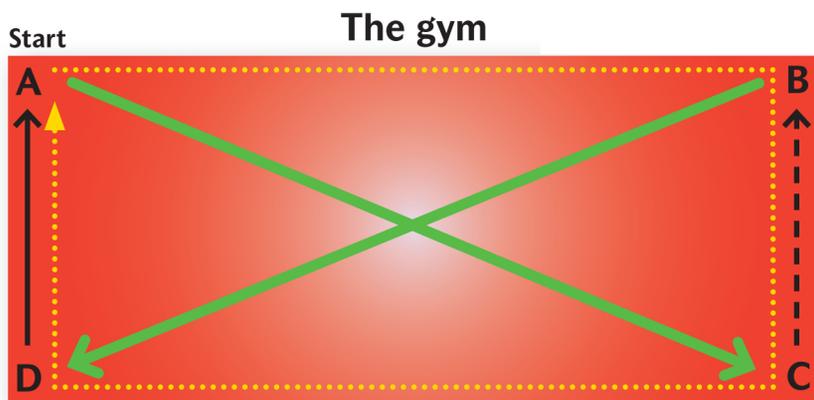
4 Listening

a  **3.55** Listen to Alex talking to his friend Sandra about aerobic and anaerobic training. Match the two parts of the sentences.

- | | |
|-------------------------|---|
| 1 Muscles need | a medium-intensity exercise. |
| 2 Swimming is | b when your muscles work without sufficient oxygen. |
| 3 Aerobic exercise is | c high-intensity exercise. |
| 4 Weight-lifting is | d oxygen for energy. |
| 5 Anaerobic exercise is | e when oxygen gets to your muscles. |

b  **3.56** Alex is telling Sandra about interval training in his PE class. Listen and follow with your finger on the diagram.

c  **3.56** Listen again and match 1–4 with A–D then compare your answers with a partner.



- | | | |
|---|---|----------------|
| 1 |  | A jog |
| 2 |  | B walk slowly |
| 3 |  | C walk quickly |
| 4 |  | D run quickly |

Did you know?

Scientists in Japan are now working on artificial muscles. You can wear them like clothes. These muscles can help people in hospital to move their arms and legs again.

Did you know?

Our tongue is a group of many muscles. They help us to talk and eat.

mini-dictionary

weight = how heavy something is
contract = to make or become shorter
support = to hold the weight of something

5 Final task

With a partner, design your own interval training lesson for PE.

- Draw a large square for the gym.
 - running quickly
 - walking quickly
 - walking slowly
 - jogging (for warming up and cooling down)
- Write the number of repetitions.
- Explain your diagram to the class. Which do you like best?

Remember, don't make your lesson impossible! Make it something you can really do in your next PE lesson. You can look on the internet.