

## CurriculumVisions Lesson

Students: fill in next to the word answer and return the document for assessment.

### Science

Book: Moving and growing (4A)

Pages 14-17

Everything here is based on our Curriculum Visions book Moving and growing (4A).

In this segment we are going to think about how muscles work to allow us to move.

You will need to go to pages 14-15 of the book.

Describe what happens to your muscles when you lift a heavy weight from your waist up to your shoulder and then lower it back down.

Answer.....

As you lift, the muscles at the front of your arm (the biceps) tighten and shorten and the muscles at the back of your arms (the triceps) relax and lengthen, pulling the weight up. When you lower the weight, the biceps relax and lengthen and the triceps tighten and shorten, lowering the weight back down.

Go to pages 16-17

How do muscles get the message to move?

Answer.....

The brain sends an electric signal down the nerves, telling the muscles to shorten (tighten) or lengthen (relax).

Describe how muscles get their energy. What happens when muscles run low on energy? How can you get more energy to muscles?

Answers.....

Energy is stored the muscles in the form of chemicals (sugars) and oxygen that travel to the muscles in the blood. The brain sends a message for the stored sugars and oxygen to be changed to movement energy.

When this energy is used up, the muscles run low on energy and you can feel tired or get muscle cramps.

You can get more energy to the muscles by eating and slowing down so more oxygen reaches the muscles.

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If you are interested in this topic continue to browse the book and watch our amazing videos. They start right on the book cover.