

# Interacting Muscles

1. Complete the sentences using words from the box.

|                  |                     |                |                |
|------------------|---------------------|----------------|----------------|
| <b>bicep</b>     | <b>tricep</b>       | <b>joint</b>   | <b>tendons</b> |
| <b>contracts</b> | <b>antagonistic</b> | <b>relaxes</b> |                |

- a. Muscles that work together as a pair are called \_\_\_\_\_ muscles.
- b. Muscles are joined to bones by \_\_\_\_\_. when a muscle contract, it can move a bone if that bone is found at a \_\_\_\_\_.
- c. an example of antagonistic muscles in the arm are the \_\_\_\_\_ and \_\_\_\_\_.
- d. to bend the leg at the knee, the quadricep \_\_\_\_\_ and the hamstring \_\_\_\_\_.

2. Match up each pair of antagonistic muscles with the movement they allow.

| <b>Muscles</b>                      |
|-------------------------------------|
| a) calf and shin muscle             |
| b) abdominal and lower back muscles |
| c) bicep and tricep                 |

| <b>Movement caused</b>                            |
|---------------------------------------------------|
| i) lower arm moves up and down                    |
| ii) foot bends and flexes                         |
| iii) bending at the waist, forwards and backwards |

b. Describe where the muscles are found that cause the head to nod forward.

\_\_\_\_\_

c. Describe where the muscles are found that lift the head back up again.

\_\_\_\_\_

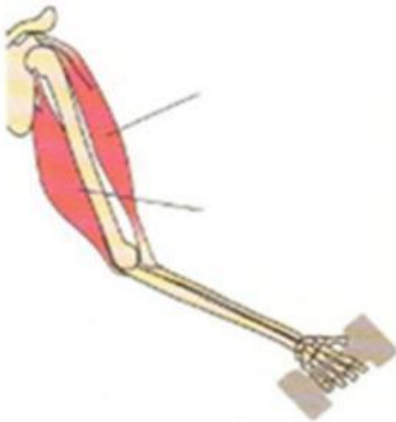
3. Label the diagrams below using the word bank.

relaxed  
tricep

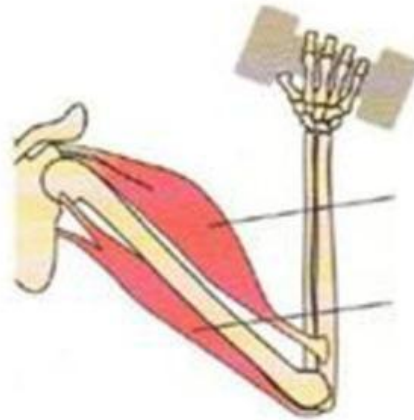
relaxed  
bicep

contracting  
bicep

contracting  
tricep



In this diagram, the arm is straight  
or E\_\_\_\_\_.



In this diagram, the arm is bent  
or F\_\_\_\_\_.

4. **Research Time:** The iris is the coloured part of the eye and it has a pair of antagonistic muscles inside of it that controls the size of the pupil (hole in the eye that lets in light).

a. Name the two antagonistic muscles in the iris.

\_\_\_\_\_ and \_\_\_\_\_

b. Which one contracts and which one relaxes to make the pupil smaller, letting in less light?

Contract \_\_\_\_\_ Relax \_\_\_\_\_

c. Which one contracts and which one relaxes to make the pupil larger, letting in more light?

Contract \_\_\_\_\_ Relax \_\_\_\_\_