

Interacting Muscles

1. Complete the sentences using words from the box.

| | | | |
|------------------|---------------------|----------------|----------------|
| bicep | tricep | joint | tendons |
| contracts | antagonistic | relaxes | |

- 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.

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

| Movement caused |
|---|
| 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.

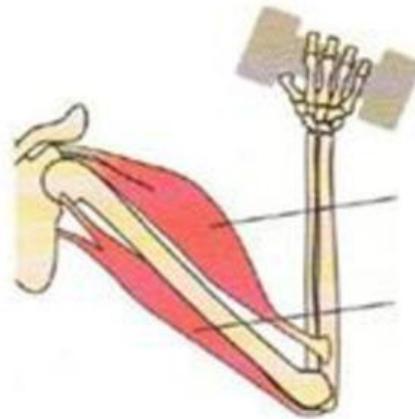
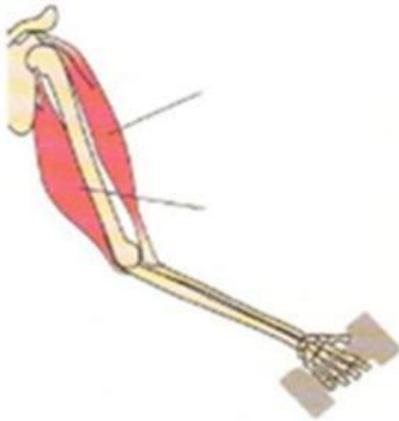
3. Label the diagrams below using the word bank.

relaxed
tricep

relaxed
bicep

contrating
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 _____