



**Our Vision:** Innovative education for a knowledge, pioneering, and global society.

**Department of Science 2018 - 2019**  
**Second Term: Revision Worksheet - 1**  
**L-1.6, 1.7 & 1.8 Muscles and bones**

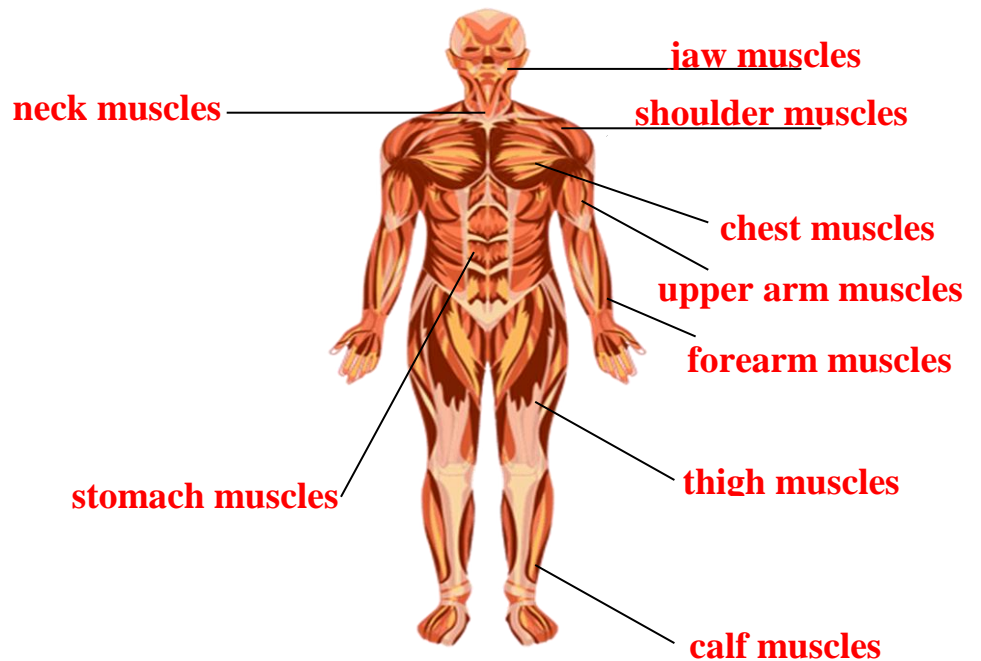
Grade 4.....

Name:.....

Date: ...../...../2019

**Q.1 Label each muscle group.**

neck muscles  
shoulder muscles  
thigh muscles  
stomach muscles  
calf muscle  
forearm muscles  
upper arm muscles  
chest muscles  
jaw muscles



**Q.2 Complete the following sentences using the words in the box**

bicep   relaxed   move   straighten   contracted  
arm   joint   muscles   bones   tricep

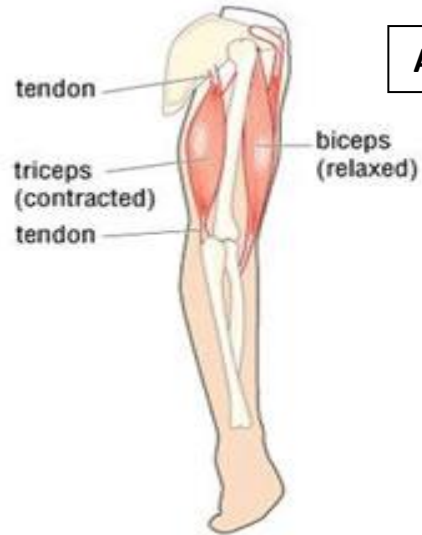
One of the key jobs of the skeleton is to allow us to **move**.

**Muscles** attach to the bones and get either shorter or longer causing the bones to move. When the muscles get shorter they are said to be **contracted** and when they get longer they are said to be **relaxed**. Where **bones** meet is known as a **joint**. The elbow joint involves two main muscles, the **bicep** and the **tricep**. These muscles work together to allow us to bend and **straighten** our **arm**.

Arm Bent



Arm Straight



**Q.3. In the two diagrams below, label the pictures as ‘Arm Bent’ and ‘Arm Straight.’ Colour in the bicep muscle pink and tricep muscle blue. Then fill in the four boxes with one of these labels.**

**tricep contracts**

**tricep relaxes**

**bicep contracts**

**bicep relaxes**

Arm .....**straight**...

**1 bicep relaxes**

**2 tricep contracts**

Arm .....**bent**.....

**3 bicep contracts**

**4 tricep relaxes**

**Q.4. Choose the correct answer.**

- a) The smallest muscle in the body is in your (**ear** / buttock ).
- b) The largest muscle in the body is in your ( ear / **buttock** ).
- c) Your body contains (**more** / less ) than 600 muscles.
- d) The strongest muscle is in your (**jaw** / eye ).

- e) When muscle contracts, it **shortens** / **lengthens** ).
- f) Muscles work ( **individually** / **in pairs** ).
- g) Muscles can ( **push** **pull** ) on bones, but they can't ( **push** / **pull** ) them back to their original position.
- h) The most active muscles are those controlling ( **eye** / **lip** ) movements.
- i) The muscle that never get tired is the ( **heart** / **leg** ) muscle.
- j) Muscles have to ( **shorten** / **lengthen** ) to make a bone move.
- k) Three muscle types are cardiac, smooth and ( **skeletal** / **heart** ).
- l) Your heart is a ( **cardiac** / **skeletal** ) muscle.

**Q.5. What does each arrow point to? Write ligament or tendon.**



**tendon**



**ligament**

**Complete the sentences based on the picture.**

- a) Ligaments connect **bone** to **bone**.
- b) Tendons connect **muscle** to **bone**.

**Q.6. Observe the picture and complete the sentences.**

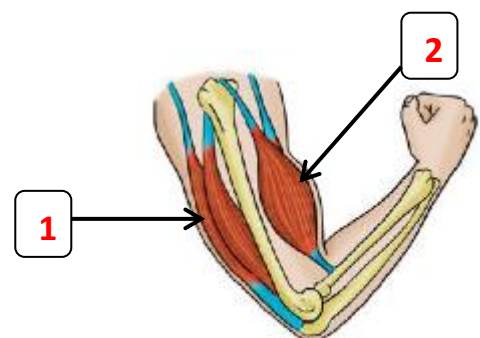
The arm is **bent** (straight / bent ).

Muscle 2 is **contracted** (contracted / relaxed ).

It is called the **biceps** (biceps / triceps ).

Muscle 1 is **relaxed** (contracted/ relaxed).

It is called the **triceps** ( biceps / triceps ).



**Q.7. Read the text and answer the questions on the right.**

Your muscles have one main job to do in your body. They help you move. They also help give your body its shape. You control many of the muscles in your body. The muscles you control are called **voluntary muscles**. You use voluntary muscles when you wave your arms or turn your head. There are other muscles in your body that you do not control. They are called **involuntary muscles**. Involuntary muscles help you breathe, and keep your heart beating and your eyes blinking. Your muscles change shape when they are at work. Muscles **contract**, or become shorter and thicker, when they are working. Your bones and muscles work together to help you move. They are connected by tissues called **tendons**. When your muscle contracts, the tendon causes the body to move.

1. What are involuntary muscles?

**Muscles which we do not control are called involuntary muscles. E.g. heart muscles**

2. Name three things involuntary muscles do for your body?

**Involuntary muscles help us breathe, keep our heart beating and our eyes blinking.**

3. What are tendons?

**Tendons are tough tissues that connect muscles to bones.**

4. What are voluntary muscles?

**Muscles which we control are called voluntary muscles. E.g. arm muscles**

5. What do muscles do when they contract?

**When muscles contract, the tendon and bone (or body) move.**

**Q.8. Tick ✓ the best answer.**

1- What would happen if muscles were not attached to bones?

We would not be able to walk.

We would not be able to move our arms.

We would not be able to have any movement.

2- What is the difference between voluntary and involuntary muscles?

Voluntary muscles cannot be consciously controlled, such as cardiac muscles.

Involuntary muscles can be controlled by an individual's will, such as skeletal muscles.

Voluntary muscles can be consciously controlled, such as cardiac muscles. Involuntary muscles cannot be controlled by an individual's will, such as skeletal muscles.

Voluntary muscles can be consciously controlled, such as skeletal muscles. Involuntary muscles cannot be controlled by an individual's will, such as cardiac muscles.

3- The intestines, walls of the stomach and blood vessels are made up of:

Smooth muscles

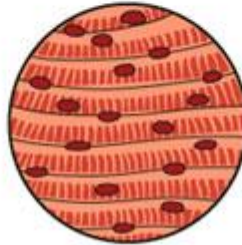
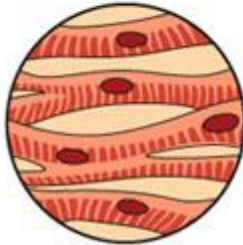
Cardiac muscles

Skeletal muscles

**Cardiac muscle**

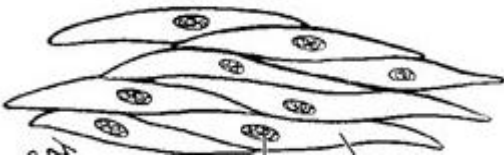
**Skeletal muscle**

**Smooth muscle**

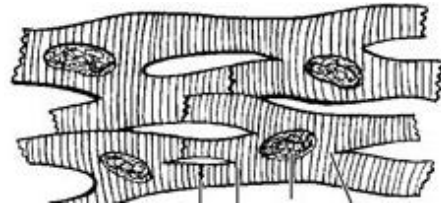


**Q.9. Identify the type of muscle tissue.**

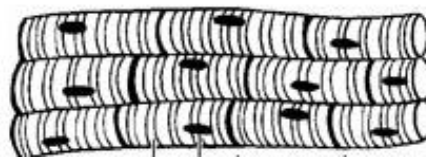
Write: Skeletal muscle tissue, Smooth muscle tissue, Cardiac muscle tissue



**smooth muscle tissue**



**cardiac muscle tissue**



**skeletal muscle tissue**