

# Science Worksheet #3

## Investigating Muscle Strength

Name: \_\_\_\_\_

Grade 7A

Date: /10/2022

1 – Identify the main muscles in the following diagram.

**A jaw muscles**

\_\_\_\_\_

**B shoulder muscles**

\_\_\_\_\_

**c pectoral muscles**

\_\_\_\_\_

**D bicep**

\_\_\_\_\_

**E triceps**

\_\_\_\_\_

**F forearm muscles**

\_\_\_\_\_

**G abdominal muscles**

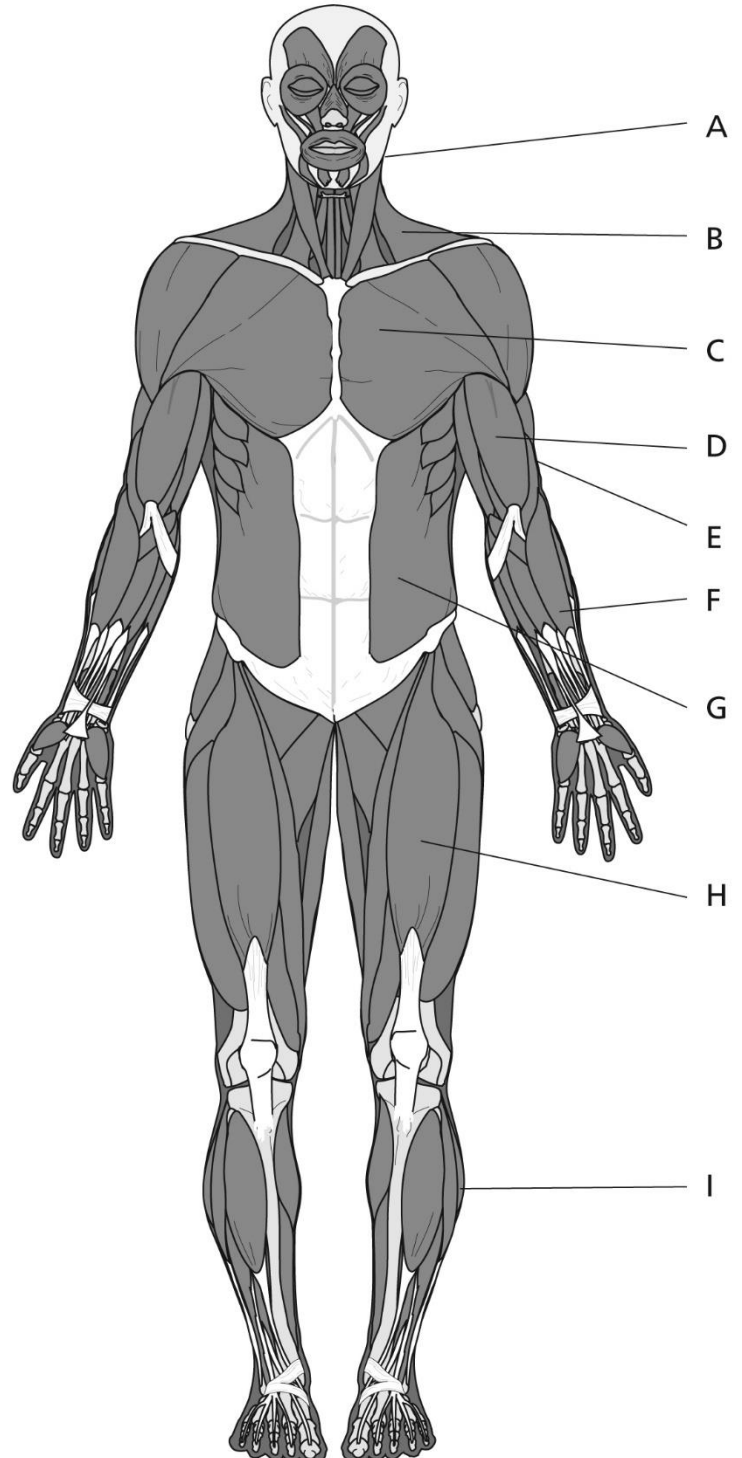
\_\_\_\_\_

**H quadriceps**

\_\_\_\_\_

**I calf muscles**

\_\_\_\_\_



2- List the **main** muscles used in each of the following activities:

a) hopping

**calf muscles, quadriceps, hamstring muscles**



b) writing

**Forearm muscles**



c) eating

**jaw muscles, face muscles, tongue**



d) doing a handstand.

**Forearm, biceps and triceps**



3- Suggest whether swimming or playing football would most increase the strength of your chest muscles. Explain your answer.

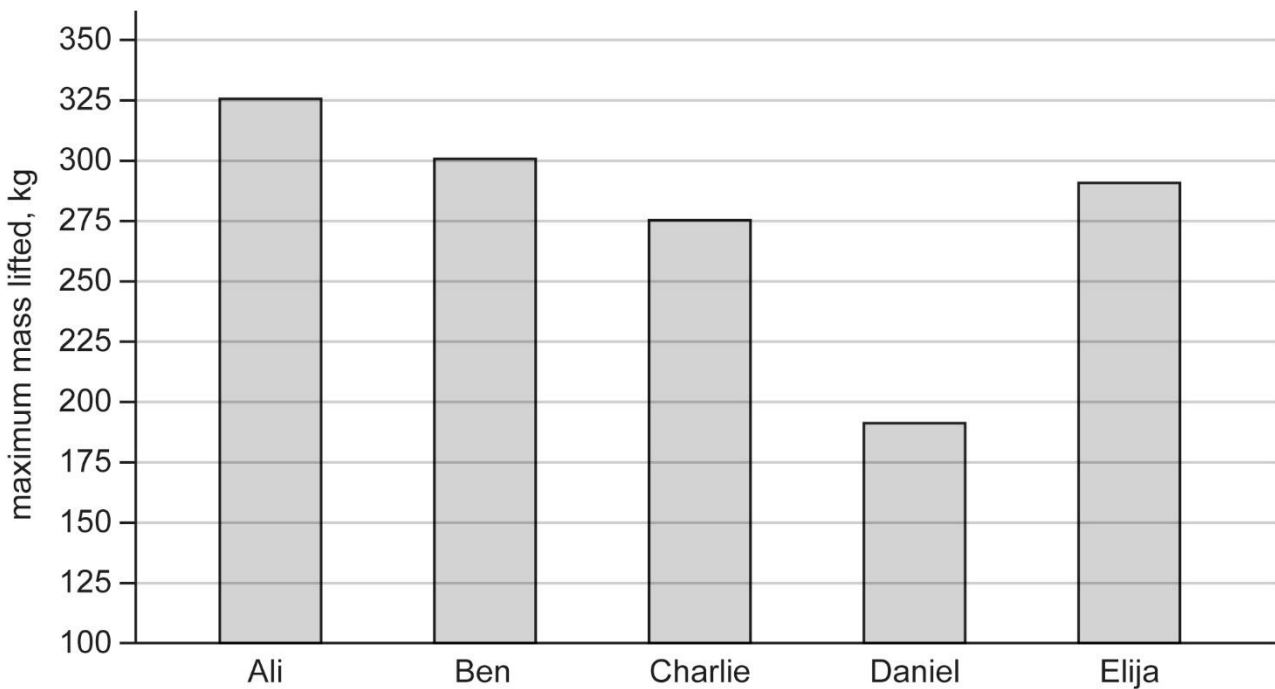
**In swimming we use our arm and chest muscles , and using them strengthens them.**

#### 4- Complete the sentences using words from the box.

bicep	tricep	joint	tendons
contracts	relaxes	antagonistic	

- a) Muscles that work together as a pair are called **antagonistic** muscles.
- b) Muscles are joined to bones by **tendons**. When a muscle contracts, it can move a bone if that bone is found at a **joint**.
- c) An example of antagonistic muscles in the arm are the **bicep** and the **tricep**.
- d) To bend the leg at the knee, the quadricep **relaxes** and the hamstring **contracts**.

#### 5- Five men compared the weights they could lift above their heads.



- a) Use information in the graph to identify the man with the strongest muscles.

**Ali**

- b) Use information in the graph to suggest which man has an injury.

**Daniel**

6- Label the following. Explain which muscle relaxes and which contracts.

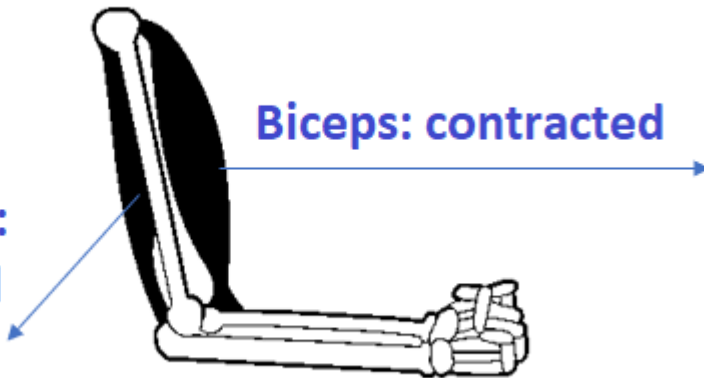
**Hamstring:  
contracted**



**Quadriceps:  
relaxed**

**Biceps and Triceps**

**Triceps:  
relaxed**



**Biceps: contracted**