



# YMCA Awards

Level 3 Applied anatomy and  
physiology

2018

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## **Muscles of the shoulder girdle**

## **Learning outcomes**

By the end of this session you will be able to:

- Demonstrate knowledge of anterior skeletal muscles and the joints they cross
- Demonstrate knowledge of posterior skeletal muscles and the joints they cross

# Trapezius



## **Origin**

Back of skull: C7, all thoracic vertebrae

## **Insertion**

Spine of scapula and lateral edge of clavicle

## **Joint crossed**

Shoulder girdle (moves scapula relative to rib cage)

## **Joint actions**

Upper fibres elevate the shoulder girdle

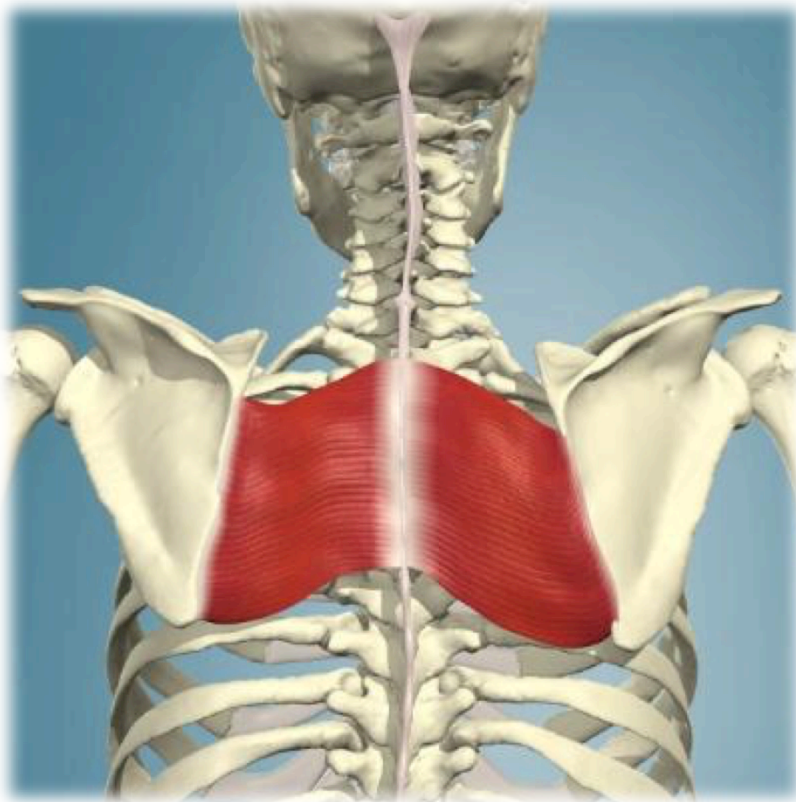
Middle fibres retract shoulder girdle

Lower fibres depress shoulder girdle

Whole muscle upwardly rotates scapula

(works as a synergist with serratus anterior)

# Rhomboids



## **Origin**

Spinous processes of cervical and thoracic vertebrae (C7 and T1–T5)

## **Insertion**

Medial border of scapula

## **Joint crossed**

Shoulder girdle (moves scapula relative to rib cage)

## **Joint actions**

Retracts scapula

Downwardly rotates scapula (works as a synergist with pectoralis minor)

## Levator scapulae



### **Origin**

Transverse processes of cervical vertebrae (C1–C4)

### **Insertion**

Medial border of scapula, between superior angle and root of the spine of the scapula

### **Joint crossed**

Shoulder girdle

### **Joint action**

Elevates the scapula (origin fixed)

Assists in downwards rotation of scapula

Laterally flexes the neck (insertion fixed)

## Serratus anterior



### **Origin**

Front of ribs 1–8

### **Insertion**

Anterior surface of medial border of scapula

### **Joint crossed**

Shoulder girdle (moves scapula relative to rib cage)

### **Joint action**

Protracts the scapula

Upwardly rotates scapula (works as a synergist with trapezius)



## Pectoralis minor



### **Origin**

Front of ribs 3–5

### **Insertion**

Coracoid process of scapula

### **Joint crossed**

Shoulder girdle (moves scapula relative to rib cage)

### **Joint action**

Protracts the scapula (origin fixed)

Downwardly rotates scapula (works as a synergist with rhomboids)

Elevates rib cage during breathing (insertion fixed)

