

**Level 3 (AAQ) Cambridge Advanced National in
Health & Social Care**

**Summer work 2026 – completed work to be
returned by 4th Sept 2026 to:
v.clark@derbycathedralschool.org.uk**

F091: Anatomy & Physiology

**Topic Area 4:
Musculoskeletal System**

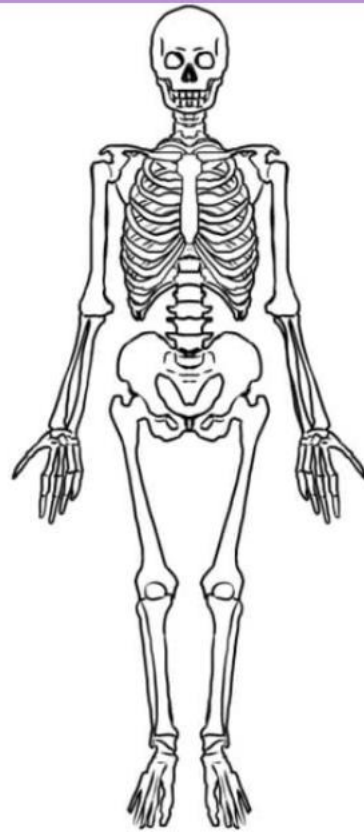


Student name: _____

Teacher(s): _____

Musculoskeletal System

The
Nervous
System in
control of
the muscle
and
therefore,
the
skeleton
movement



The skeleton has many purposes and roles in the body, what are the main 5?

1

2

3

4

5

& **MUSCLE**  **BONE**

4.1.1 What does the axial skeleton consist of?

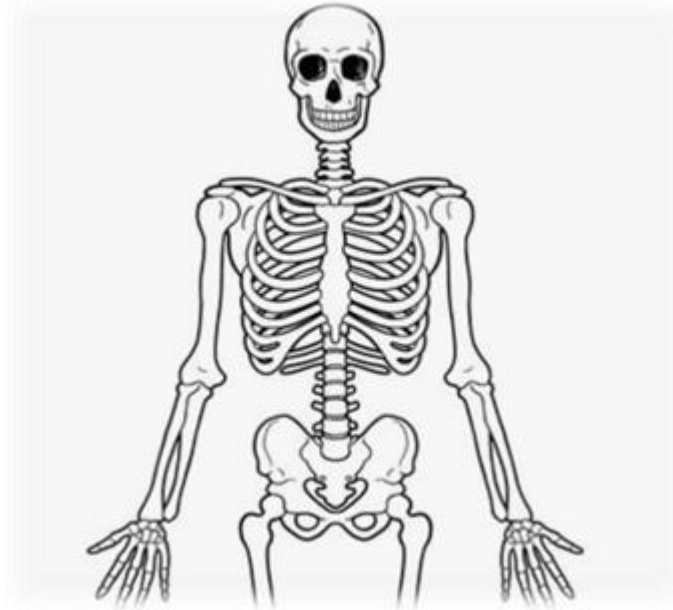
1.

2.

3.

What is the function of the axial skeleton?

Colour the axial skeleton, label the cranium, sternum, ribs and vertebral column



4.1.1 What does the appendicular skeleton consist of?

1.

2.

3.

4.

5.

6.

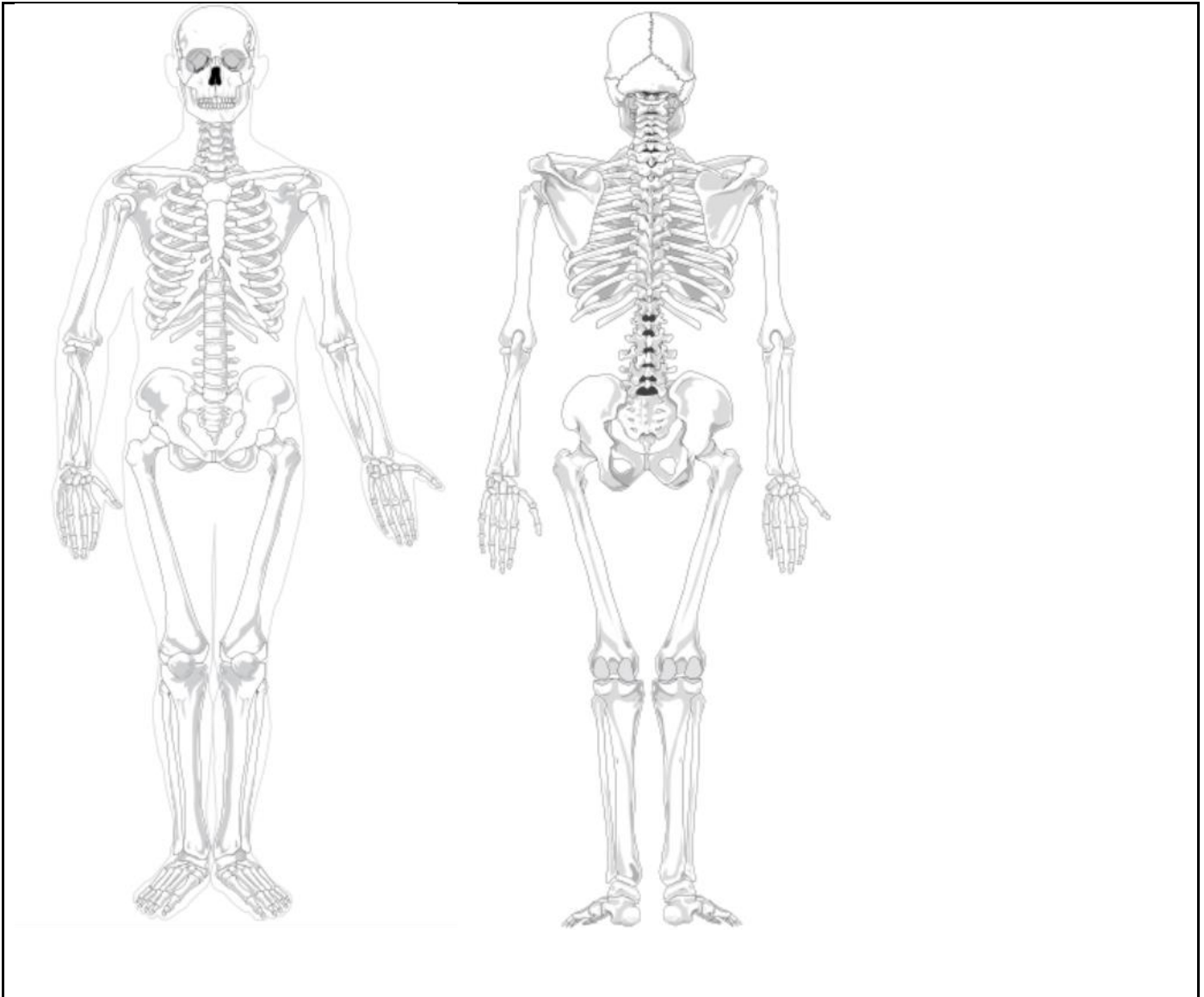
7.

8.

9.

10.

Colour the appendicular skeleton, label the 10 bones



Using the key below, identify the function/role of each of the 10 bones labelled.
M - movement
W – weight bearing support
P – protection
Compare the axial skeleton with the appendicular
Compare the axial skeleton with the appendicular

Explain what the below images are about

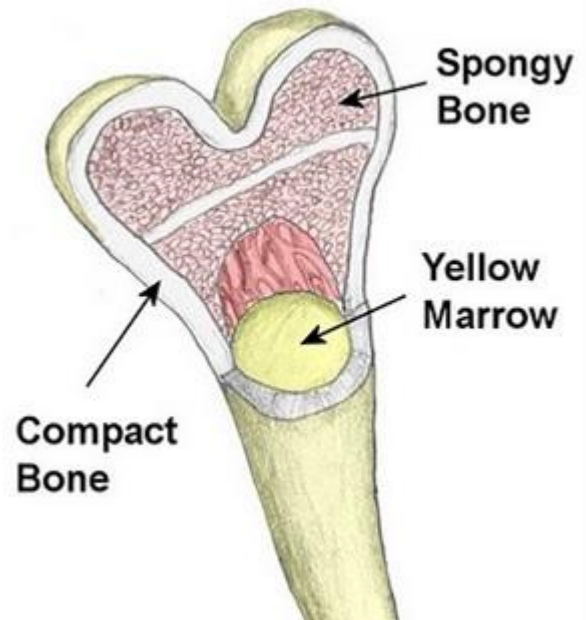


What is a growth plate?

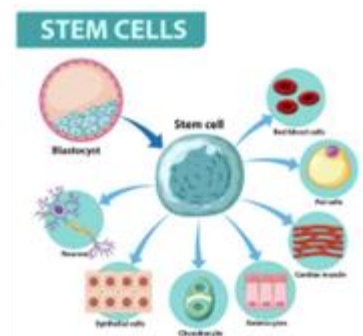
What is the composition of the growth plate and what is its purpose?

Bone structure – what is compact bone and where is it located?

What is bone marrow?

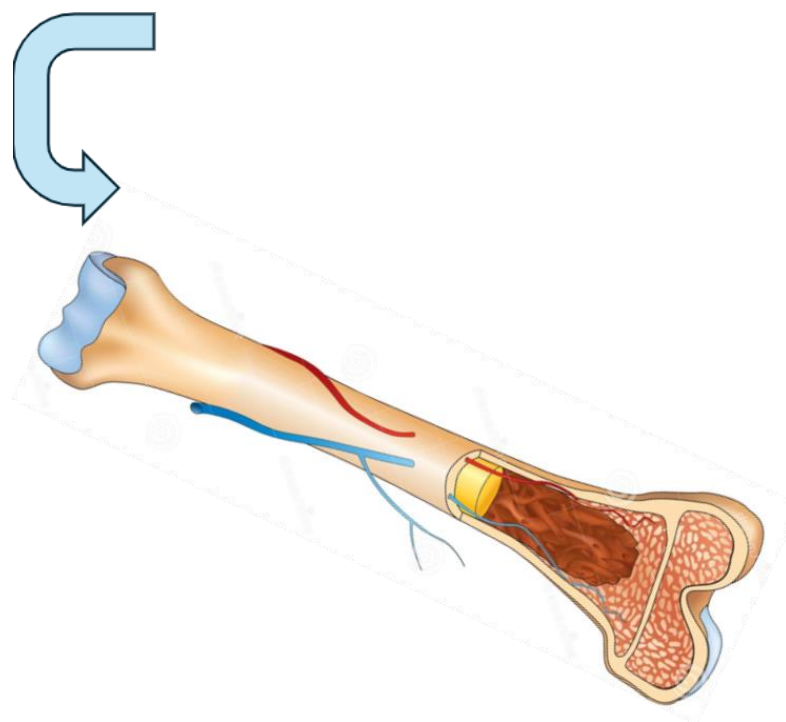


What are stem cells? What is their role in the body?



Label the compact bone, bone marrow and where a growth plate would be in a child

Cartilage cushioning

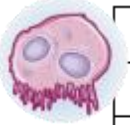


4.1.3 Formation of bone, the growth and the repair



Osteoblasts

Osteoclasts



4.1.4 What is cartilage?

What are the main functions of cartilage?

1.

2.

3.

What is the role of cartilage in the sternum?

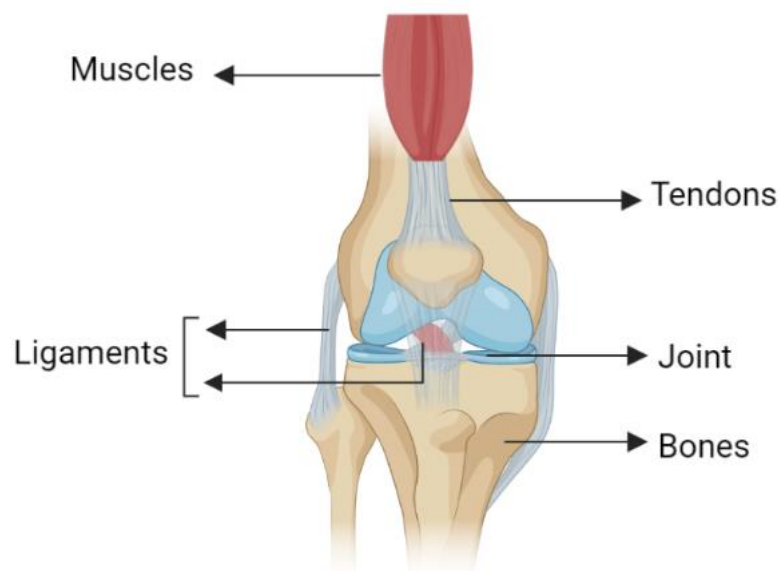
What is the role of cartilage in the trachea?

What is the role of the cartilage epiglottis?

What is the role of the costal cartilage?

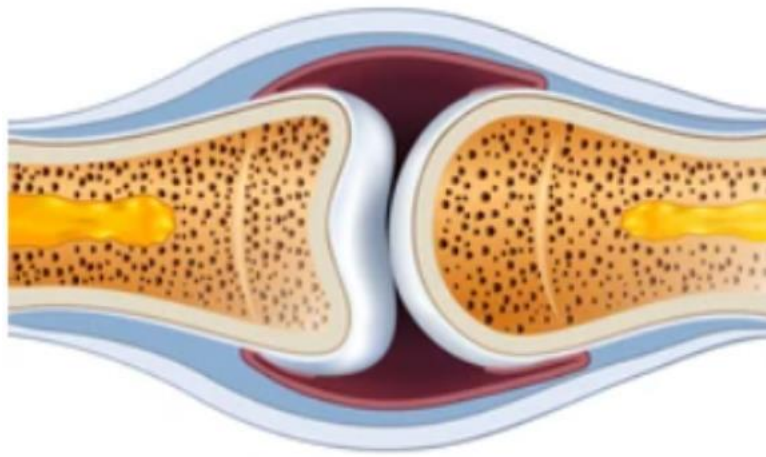
What are ligaments?

What are tendons?



Tendons and Ligaments

4.1.4 What is a synovial joint?



Label the above joint with 7 structures from page 3 of the spec.

Complete the table with the 7 structures and their function in a synovial joint
