

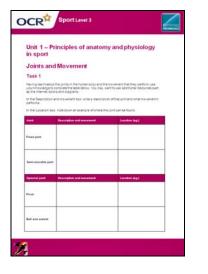


Unit 1 – Principles of anatomy and physiology in sport

Joints and Movement

Instructions and answers for Teachers

These instructions should accompany the OCR resource 'Joints and movement', which supports the OCR Level 3 Cambridge Technical in Sport Unit 1 – Principles of anatomy and physiology in sport.



Associated files: Joints and Movement (activity)

Task 1 – approx. 30 minutes.



This activity offers an opportunity for English skills development.

This lesson element is designed to test the learner's knowledge on the function and location of different types of joints. Sample answers are provided in the following table.







Task 1

Having learnt about the joints in the human body and the movement that they perform use your knowledge to complete the table below. You may want to use additional resources such as the internet, books and diagrams.

In the 'Description and movement' box: write a description of that joint and what movement it performs.

In the 'Location' box: note down an example of where the joint can be found.

Joint	Description and movement	Location (eg:)
Fixed joint	Has limited movement – allows for growth or greater stability. Once growth is complete the bone plates are securely connected by interlocking tissue.	The skull – the adults' skull structure joints show up as wiggly lines. In infancy these are loosely attached to allow for the expansion of the growing brain.
Semi-movable joint	Partly flexible joints that are linked by fibrous tissue of cartilage.	Vertebrae
Synovial joint	Description and movement	Location (eg:)
Pivot	A peg like projection from one bone that turns inside another. Allows rotation on a spinal axis.	Top two neck vertebra
Ball and socket	A ball shaped head of one bone that fits into the cup shaped cavity of another. Allows a wide range of movement.	Нір
Saddle	Both bones have a concave and convex area (like a horse saddle). Allows the bones to slide back and forth, and side to side. Has limited rotation.	Base of the thumb







Synovial joint	Description and movement	Location (eg:)
Hinge	The convex surface of one bone fits into the concave surface of another. Allows for to-and-fro movement mainly in one plain.	Elbow
Ellipsoidal	An ovoid (egg shaped) bone that nestles into an ellipsoidal cavity. Allows the joint to flex and move side to side. Has limited rotation.	The wrist – where the radius meets the scaphoid bone.
Gliding	Where two almost flat bone surfaces slide over one another. Has limited movement.	Between the tarsal bones of the ankle.

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