

Summary

Topic 1.1 - Skeletal System

Subject	Year	Start date	Duration
Sports, exercise and health science	IB1, IB2	Week 1, September	2 weeks 4 hours

Course Part

Topic 1 - Anatomy

Description

The musculoskeletal system is made up of the skeletal system which includes the bones and joints, and the muscular system which contains the muscles. When bones come together, they form joints. Muscles cross these joints and pull on the bones causing movement at the joints. Therefore, the musculoskeletal system plays a vital role in allowing you to do all the movements that are needed in daily life. To understand how bones and muscles are involved in sporting actions such as running, jumping up to spike a volleyball, kicking a football or throwing a javelin, it is important to know about the location and structure of specific muscles and bones, and to understand how they work together. This chapter will introduce these topics and will provide a basis for future chapters that also refer to the musculoskeletal system.

Inquiry & Purpose

Inquiry / Higher Order Questions

Type	Inquiry Questions
Content-based	How does the anatomy of skeletal system allow the body to function effectively?

Curriculum

Aims

Develop an ability to analyse, evaluate and synthesize scientific information

Objectives

Demonstrate knowledge and understanding of

- facts, concepts and terminology
- communicating scientific information

Apply

- facts, concepts and terminology
- methods of communicating scientific information

Syllabus Content

Core

Topic 1: Anatomy

1.1 The skeletal system

- 1.1.1 Distinguish anatomically between the axial and appendicular skeleton.
- 1.1.2 Distinguish between the axial and appendicular skeleton in terms of function.
- 1.1.3 State the four types of bone.
- 1.1.4 Draw and annotate the structure of a long bone.
- 1.1.5 Apply anatomical terminology to the location of bones.
- 1.1.6 Outline the functions of connective tissue.
- 1.1.7 Define the term joint.
- 1.1.8 Distinguish between the different types of joint in relation to movement permitted.
- 1.1.9 Outline the features of a synovial joint.
- 1.1.10 List the different types of synovial joint.

ATL Skills

Approaches to Learning



Thinking

- In this unit, we will
 - give students time to think through their answers before asking them for a response
 - reward a new personal understanding, solution or approach to an issue
 - ask open questions
 - set students a task which required higher-order thinking skills (such as analysis or evaluation)
 - build on a specific prior task



Communication

- In this unit, we will
 - have students give an oral presentation without reading from their notes
 - construct a task so that students practise their listening skills
 - assess or give feedback on speaking or writing concisely
 - encourage or require students to plan a response before they begin



Self-management

- In this unit, we will

- set deadlines for students to meet
- require students to revise and improve on work previously submitted
- ask students to set their own learning goals
- ask students to break down a larger task into specific steps
- ask students to look for personal relevance in the subject matter
- practise or discuss strategies to increase concentration
- give students feedback on their approach to a task
- model positive skills and behaviours such as being well organized and punctual
- help students to learn from failures or mistakes
- create an atmosphere where students do not think they have to get everything right first time



Developing IB Learners

☆ Learner Profile



Inquirers



Knowledgeable



Thinkers



Assessment

🗨️ Peer and self assessment

Students will have ongoing self and peer assessment opportunities throughout the unit. This will mostly be made up of practise exam questions and smaller tasks.

 Stream & Resources

Stream

1



Mark West


Posted **1 file** on May 18, 2021 at 8:24 AM

Topic 1.1 - Skeletal System

Skeletal System Powerpoint



Topic_1.1-1.2_-_Skeletal_and_Muscular_system_PPT_2__1_.pptx
20 MB PowerPoint Presentation

 Resources



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Topic 1.1 - Skeletal System

Formative topic test for Topic 1.1 Skeletal System



Topic_1.1_Skeletal_System_-_Topic_test.docx
400 KB Word Document



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