

O3.2_CLIL plan for a skeletal system

Age group/class: 14-15 years old/year 9

Lesson title: Skeletal system of a human

School Discipline: Biology

Key concepts: anatomy, skeletal system

Aims:

- Experience the importance of skeleton and the ways to keep them strong/healthy
- Get the basic knowledge of the skeletal system
- Be able to distinguish the different bones

Skills developed: observation, description, analysis, research, collaboration

Materials/Equipment needed:

- VR headset
- VR video link (https://eloquent-ramanujan-887aa5.netlify.app/biology.html)
- hyqlKVm2ks
 "What If We Didn't Have Bones. What Would Happen?" (the video may be shown in the introductory activity to activate the previous knowledge)
- Handouts: a picture of a skeleton (https://www.pinterest.com/pin/278097345720540302/), worksheets for the skeletal system

(https://www.pinterest.co.uk/pin/161707442851580337/)

Lesson plan:

Stages	Description of activity	Time
	If this is a first VR experience for students – go through	
before the	the safety rules:	
lesson	 Learners are to sit down whilst using the VR 	
	glasses and not hold anything in	





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	their hands, unless the experience is of such a nature that it requires you	
	standing, in which case, ensure enough space is allowed around all students.	
	• Learners must not use the headset when they are: tired, need sleep, under emotional stress or anxiety, when suffering from cold, flu, headaches,	
	migraines as this can worsen their susceptibility to adverse reactions. • Learners should be given the choice to opt out of	
Introductio	 using VR. Warm up by asking students: -What do you know about the skeletal system? 	2 min
n	 How many bones do you think we have in our body? The teacher shows the YouTube clip "What If We Didn't Have Bones—What Would Happen?" ask the students if their predictions were right or 	4 min
	not. Show the Picture (or a model) of a skeleton and explain it in depth. Say why the skeleton is important. The name and location of the major bones in the body; explain the term <i>bone marrow</i> .	1 min 15 min
	Introduce the phrases :consist of, is formed by, is made up of, contains (while presenting the information on the skeleton system, emphasise these phrases).	
	 Ask the students if they know how to keep the bones strong and healthy. 	1 min
Initial Immersive Experience	Say that they are going to see a short video on the VR headsets.	
_	Learners put on the VR headsets and explore the video at their own pace.	2 min



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	Turn the headsets off and bring students back into the classroom. Ask the learners to tell what they have just seen.	1 min
Guided Immersive Experience	Tell the students that in pairs they have a task to write the four ways to keep bones strong and healthy. Before starting to collaborate in pairs, ask to put on the VR headsets again and dive back into the immersive experience, but this time with the aim to find the information for the task. The students may explore for 2-3 min. Learners spend time thinking of the ways that keep bones strong and healthy. Ask the students to say their ideas, write them on the board.	4 min 2 min
Follow up	Deepening knowledge about the skeleton system using the phrases consist of, is formed by, is made up of, contains. Give the worksheets with skeleton. Ask in groups of four to find the bones given in the wordlist (source: https://www.pinterest.co.uk/pin/161707442851580337/)	8 min
Formative Assessment	The teacher opens the worksheet on the white board and asks the groups to tell the answers. Each group has a task using the phrases to tell the bones of different parts of the skeleton (i.e head, arm, leg)	5 min



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The teacher ensures that the answers and the	
pronunciation of the terms are right.	