



# The Circulatory System in VR

**Learning Area**

Science

**Year Level**

Year 8

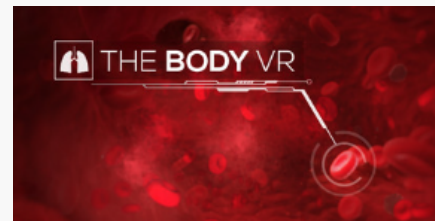
## Introduction

This lesson will take students on an immersive journey inside the human body using virtual reality. By utilising The Body VR app and additional VR videos, students will explore the circulatory system, learn how blood cells work, and understand the processes inside the heart. They will also create their own models to illustrate their understanding of the human circulatory system.

## Application

### The Body VR: Journey Inside a Cell

An educational VR experience that offers an interactive dive into the microscopic world of human biology. Users can explore cellular structures and functions in vivid detail, gaining a deeper understanding of how cells operate. The experience's 'Anatomy Viewer' allows users to interact with various body systems which will engage learners of all ages.



## Lesson Overview

### Lesson Objectives

- Understand the structure and function of the human circulatory system.
- Explore the role of blood cells and the heart in transporting oxygen.
- Create models to demonstrate knowledge of the circulatory system.

### VR/AR Resources

- [Cardiovascular Ageing EN](#)
- [VR 360 Human Body : Circulatory Syst...](#)
- [Swim Along the Arteries and Through t...](#)
- [WHAT HAPPENS INSIDE YOUR BODY...](#)
- [Travel Through the Human Heart Using Virtual Reality](#)
- [A Virtual Reality tour inside the Heart](#)



### Lesson Outline



#### Before the Immersive Learning Journey

- Teachers and students should familiarise themselves with the IMVR experience using [The Body VR Essential Guide](#).
- Ensure all VR equipment and resources are properly set up and functioning.
- View all suggested resources to ensure their suitability for the cohort.
- Students should have a basic understanding of the different organ systems in the human body.



#### During the Immersive Learning Journey



**IMVR Station:** Students will use The Body VR: Anatomy Viewer to explore the different organ systems in the human body, paying close attention to the circulatory system. Working with their partner/groups, students record the different organs in the circulatory system. Encourage students to utilise the 'Explode' function from the right menu.

**HHVR Station:** Students watch the VR videos listed above to gain different perspectives on the circulatory system. Students aim to record the different organs in the circulatory system and write a brief description about the function of each organ. Students may use this additional resource to assist - [Human Anatomy - Circulatory System](#).

**Creation Station:** Students create their own models of the circulatory system. They can use craft materials or digital tools ([Tinkercad](#), [ThingLink](#)) to build annotated 3D models.

Optional:. Download this [3D model](#) to get students started.

**Research/Reflection Station:** Students research how a disorder in cells or tissues can affect how an organ functions, such as how hardening of the arteries can lead to poor circulation or heart disease. Useful links:

- [The circulatory system in humans – Coronary heart disease](#)
-  Heart Disease | Health | Biology | FuseSchool (4:33)
-  GCSE Biology - Why Do We Get Heart Disease and How to Tr... (5:16)
- [Heart Disease](#)



### After the Immersive Learning Journey

Students present their models and explain their annotations to the class/peer groups. Class discussion to assess understanding and reflect on the VR experiences.

#### Discussion Questions:

1. How do blood cells function in transporting oxygen throughout the body?
2. What did you find most surprising or interesting about the circulatory system?
3. How can immersive VR experiences enhance your understanding of biological processes?