# Heart and Heart Racing





#### **Science Intent**

Through science, children are taught to be curious about the world around them. Our curriculum is stimulating, engaging and challenging and ensures full coverage of the National Curriculum. It fosters a sense of wonder about natural phenomena. Children develop and use a range of scientific skills including questioning, fair-testing and drawing conclusions. Scientific vocabulary is taught and built upon as topics are revisited progressively in different year groups and across key stages.

## **Key Vocabulary**

Heart, healthy, circulation, pulse, heart rate, ventricle, atrium, tri-cuspid valve, semi-lunar valve, mitral valve, aorta, artery, vein, pulmonary, vena cava, chamber, coronary, oxygen, carbon dioxide, muscle, exercise.

English – National Curriculum/ Skills	Overview
To link with the science topic, pupils write:	With knowledge gained from research and scientific
- Explanations and	investigations (such as dissecting an animal's heart)
- Persuasively (through topic).	children write an explanation to show how the
	heart and circulatory system works using
Inspired by Room 13 and Dracula, children write:	organisational devices such as sub-headings, bullet
- A scene setting,	points, underlining);
- A persuasive text,	
- Instructions,	Write a text persuading people to live a healthier
- Recounts and	life by changing what they do and what they eat



# **MEDIUM TERM PLANNING | UNIT OBJECTIVES**

# **Nunthorpe Primary Academy**

# - A news report.

Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own Noting and developing initial ideas, drawing on reading and research where necessary.

Selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning.

Using a wide range of devices to build cohesion within and across paragraphs
Using further organisational and presentational devices to structure text and to
guide the reader [for example, headings, bullet points, underlining].
Identifying audience and purpose and writing in appropriate style.

Understand active and passive voice.

Use paragraphs for clarity and structure.

Use organisational devices (headings, bullet points, underlining)

Advanced punctuation: brackets, dashes, commas to show parenthesis

Use organisational devices (headings, bullet points, underlining)

Selecting vocabulary and grammatical structures that reflect the level of formality

Varying sentence starters

Researching and selecting relevant information

Use organisational devices (headings, bullet points, underlining)

Use modal verbs

Use coordinating and subordinating conjunctions

selecting vocabulary and grammatical structures that reflect the level of formality and varying sentence starters to grab the reader's attention.

Write a persuasive text advertising a stay at the Crow's Next, Whitby (based on Room 13).

Write instructions about how to recognise a vampire.

Write a diary entry as Jonathan Harker meeting Count Dracula at Bram Castle.

Write a new report based on a ship wreck at Whitby.

Use semi-colons, colons or dashes to mark boundaries.

### Science - National Curriculum/ Skills

Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

Describe the ways in which nutrients and water are transported within animals, including humans

Work scientifically by:

- -exploring the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health.
- -carrying out practical tasks to learn about the function of blood in the body and how it transports whatever we consume (helpful or harmful).
- -Using knowledge gained from dissection of an animal heart to work out how the human heart functions.

#### Overview

Children will build on their learning from years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system) to explore and answer questions that help them to understand how the circulatory system enables the body to function. They observe a teacher led demonstration of the dissection of a pig or sheep's heart and identify key features of the organ. They learn how the action of these parts come together to pump oxygenated and deoxygenated blood to different areas of the body. They will also act out the passage of blood to the lungs, back to the heart and to other body parts, using a large heart diagram and colour coded blood cells.

They will also use research and practical resources to find out the main constituents of blood and their functions.

Children will also learn how to keep bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be

# MEDIUM TERM PLANNING | UNIT OBJECTIVES Nunthorpe Primary Academy

		harmful	I to the human body.
Art – National Curriculum / Skills		Overview	
Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).		Children research, evaluate and design gargoyles which they then make from clay and paper mâché incorporating wires for structure and using techniques to show texture.	
Debate & Discussion Opportunities	Trips and Experiences		Possible Linked Texts
			Room 13
			Dracula

Year Group: 6

Groosham Grange