



# NURTURING NATURE: Engaging and Taking Responsibility

## Focus Overview

### YEAR 6: Plastic



At Our Lady  
and  
St. Hubert's,  
home, school  
and parish  
work  
together,  
knowing that  
God is with  
us in all we  
do

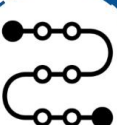
**A Wonderful World:**  
Appreciating God's  
Creations



**Peace and Conflict:** Respect  
for all Individuals



**A Moment in Time:**  
Learning from the  
Past for Our Future



**We are Engineers:**  
Embracing Technology  
to Solve problems



**Nurturing Nature:**  
Engaging and Taking  
Responsibility



**Our Place in the  
World:** Identity and  
Community



## Nurturing Nature: Engaging and Taking Responsibility Year 6 – Plastic



Science and sustainability will be the driving force behind our units in our theme of 'Nurturing Nature'. Children will learn about the delicate balance of nature and the world around us and the impact of humans and their decisions on this balance. Throughout this unit, children will explore the impact of plastic on our planet and through an enquiry process, look at how as a school and future generation we can solve some of the issues faced – changing behaviour and raising awareness of what could ultimately be

a problem in years to come. Through **Catholic Social Teaching**, children will be able to talk about *human dignity* in relation to looking after God's world.

Children will begin by looking at why plastic is such a problem and through group work look for solutions on a local and global level: developing solutions that protect the world and its sustainability. Fieldwork will play an important role in allowing children to investigate locations, spot patterns and developing their understanding of sustainability. Throughout the enquiry process, children will explore and apply a variety of the **6Cs**.

In **Computing**, children will use spreadsheets to organise, analyse and interpret data, that they have found from both primary and secondary sources. Children will use software to present their findings to a group. While in **Design and Technology**, children will follow a design specification to design, make and evaluate functional pieces from recycled plastic. Finally, in **Science**, children will look at animals, including humans, and consider the life processes that are internal to the body, such as the circulatory system, parts of the digestive system and how they transport fluids around the body.

### Theme Impact

Children will have a deeper understanding of the impact of our actions on our planet, in particular the use of and subsequent waste management of plastic. They will understand why it is crucial to develop plans to manage the use of plastic more effectively and think about when and where it is needed or whether alternative biodegradable products can be found. Pupils will use creativity to create logical plans and solutions to the problem of plastic.

### Catholic Social Teaching

#### Care for creation and Dignity in work

Children will develop their understanding further of living sustainably for the common good. They will discuss the **dignity** in work when creating a sustainable world for the good of others, remembering that together we are working together to build God's kingdom. They will continue to embed the teachings of human dignity to explore human actions in creating a sustainable world.

### Enquiry

#### 6C Objectives

##### Character

- I see problems and challenges as learning opportunities.
- I ask for constructive criticism to help me to improve.
- I can maintain a high level of focus for the entirety of a task/project.
- I understand the terms grit, perseverance, resilience and tenacity.

##### Communication

- I can make considered choices about my presentation style to engage my chosen audience and explain why these choices were made.
- Learn from others- David Attenborough etc

##### Collaboration

- I understand how a group can work interdependently- allocating roles effectively
- I ensure that important
- decisions are discussed and take each group member's ideas into account
- I can utilise my group's different viewpoints and cultures and use this to enrich my group's outcome

##### Creativity

- I can see and describe how my idea/project will positively influence the world
- I can create a logical plan which will help me bring my idea to reality

##### Critical Thinking

- *Use sources to support a point of view*  
I can use my research to help shape my understanding of a topic/project
- *Express a point of view and give reasons for it*  
I can analyse different arguments/sources of information and select the most appropriate information for my project
- *Arrive at judgements*  
I can make logical conclusions based on a variety of information /arguments/sources and draw my own conclusions with reasons.
- *Recognise difference, comparing and contrasting different points of view.*  
I can find and identify key themes/viewpoints across different sources of information

## Citizenship

- I can see how my projects and work can make a positive difference to the world and my fellow citizens
- I show a strong commitment to addressing important environmental issues through my project/work
- I take account of other people's cultures and world views when designing my projects/ideas

## Computing

### National Curriculum Objectives

- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

### Knowledge and Skills Progression

- IT1** Know that data can be processed to create meaningful information
- IT2** Know how to sort data
- IT3** Know how to filter data
- IT4** Know that cells can contain formulas
- IT5** Use formulas to manipulate data (e.g. +ing or xing data)
- IT6** Present data and information clearly for an audience (using e.g. presentation software)
  
- N2** Use social media to promote projects or conduct appeals or initiatives
- N3** Know how to use internet communications to promote a cause

## DT

### National Curriculum Objectives

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- Select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.
- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

### Knowledge and Skills Progression

- R1**- Children safely use and critically explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- R2**- Children use what they have learnt about media and materials in original ways, thinking about uses and purposes to benefit their design.
- R3**- Children represent their own ideas, thoughts and feelings through design and technology in a variety of ways using different forms of communication.
  
- D1**- Use their research to develop their own design criteria.
- D2**- Draw a fully labelled/annotated sketch/diagram of their product, including measurements and cross-sections- some may use computer aided design.
- D3**- Choose the materials/ ingredients /tools they will use, based on their suitability for the task. Indicate where/how materials will be joined in order to create a stable structure.
- D4**- Write a detailed list of the materials/ ingredients/tools they will need- including sourcing their own materials where appropriate. Indicate where mechanisms will go and explain how they will function
- D6**- Write (brief) instructions for how they intend to make their product.
  
- MC2**- Joining - Join a range of materials using a variety of suitable methods.
- MC3**- Testing- Test their product as they work, making informed adjustments..
- MC4**- Improving - Apply their prior knowledge and understanding to make structures stiffer/ more stable as they work. Does it meet the design criteria? Who is the audience?
- MC6**- Finishing- Create a polished and well-finished product.
  
- E1**- Positive- Identify and discuss the strengths of their product.
- E2**- Critique- Identify any areas for development/ improvements that could be made.
- E3**- Audience- Discuss whether the product meets the requirements of the brief/the needs of the user – is it fit for purpose?
- E4**- Improve- Suggest how their product could be improved. Take part in peer evaluation, giving and receiving feedback from fellow pupils.

Science	
National Curriculum Objectives	
<ul style="list-style-type: none"> <li>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</li> <li>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</li> <li>Describe the ways in which nutrients and water are transported within animals, including humans.</li> </ul>	
Knowledge and Skills Progression	
<p><b>E1:</b> plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>E2:</b> take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>E3:</b> record data and results of increasing complexity using scientific diagrams and labels, classification keys,</p> <p><b>E4:</b> using test results to make predictions to set up further comparative and fair tests</p> <p><b>E5:</b> report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</p> <p><b>E6:</b> identify scientific evidence that has been used to support or refute ideas or arguments</p>	
Working Scientifically Suggestions	
<ul style="list-style-type: none"> <li>explore the work of scientists and scientific research about the relationship between diet, exercise, drugs, lifestyle and health. classification system</li> </ul>	
Application	
<p><b>Is plastic a threat to humanity?</b></p> <p>Application in this theme will be through the enquiry project. Children will have a number of opportunities to explore the 6Cs, eventually presenting their work on whether plastic is a threat to humanity. They will outline their reasons as to why they agree or do not agree with the statement, using information from both primary and secondary sources.</p> <p>Children will also present solutions to the problems they have found and how they could 'save' humanity.</p> <p>Children will also have opportunities to evaluate how they have worked, particularly when they have completed group work.</p> <p>How can we become a plastic clever school and change for the better – leaving a legacy. Develop a charter and promote on the school website.</p> <p>Children will also explore Catholic Social Teaching, through discussing human dignity when discussing the actions of humanity in relation to the care of God's world.</p> <p>School event – sustainability</p>	
Wider Curriculum Opportunities	
Writing	Reading
<p><b>Persuasion</b> - Writing letters to supermarkets urging less packaging. Writing letters to school leaders, promoting new ways of working</p> <p><b>Debates</b> – write up of application – Is plastic a threat to humanity?</p> <p style="text-align: center;"><i>Benefits of plastic</i> <i>Should single use plastic be banned?</i> <i>Should supermarkets sell vegetables in plastic bags?</i> <i>Should waste collections be reduced to once a fortnight?</i> <i>Should councils provide recycling bins in public places e.g. parks?</i> <i>Should people be taxed to use plastic products?</i></p> <p><b>First person narrative writing</b> – I am...a plastic bag</p> <p><b>Narrative</b> – Dystopian settings – ice caps melted, desert/waterworld, Adventure to Everest with plastic bottles. Ocean Adventure</p> <p><b>Poetry</b> - Nature</p> <p><b>Non – chronological Reports</b> – The problem with plastic</p> <p><b>Newspaper report</b> – Dystopian event caused by climate change</p> <p><b>Explanation</b> – The impact of plastic on the environment</p> <p>Diary Entry - Narrative diary linked to dystopian future – link to Greenpeace video as stimulus <a href="https://www.youtube.com/watch?v=sjU5i98nx74">https://www.youtube.com/watch?v=sjU5i98nx74</a></p>	<p>One plastic bag</p> <p>Song of the dolphin boy</p> <p>Let's Investigate: Plastic Pollution - Ruth Owen</p> <p>Somebody Swallowed Stanley - Sarah Roberts &amp; Hannah Peck</p> <p>This Book is Not Rubbish - Isabel Thomas &amp; Alex Paterson</p> <p>A Planet Full of Plastic - Neal Layton</p> <p>The Problem With Plastic - Ruth Owen</p> <p>Kids Fight Plastic - Martin Dorey &amp; Tim Wesson</p> <p>Trash – Andy Mulligan</p>
Computing – application of previously taught skills	
<p><b>Presentation of information</b></p> <p>Select, use and combine a variety of software on a digital device to design and create content that collects, analyses, evaluates and presents data and information.</p>	
Enrichment	
<p>Field Trips – local area</p> <p>Trip to water cleaning plant – impact of wipes on water cleaning mechanisms</p> <p>How much plastic can be found in our local area?</p>	

How much plastic can be found in our local shopping centre and can this be replaced with more biodiverse material?

Outside speakers - sustainable shops (zoom/teams)

Charity work – cleaning the oceans

Recycling fashion show

Sea Life Centre

### Home Learning

How much plastic do we use at home?

Create plastic diary – create data to analyse in computing

Complete again at end of theme to see impact

Plastic research

Set children activities to create items from plastic recycling <https://www.wwt.org.uk/discover-wetlands/fun-and-learning/make-it-activities/>

### Websites/Resources

<https://www.wwt.org.uk/discover-wetlands/fun-and-learning/make-it-activities/>

<https://www.wwt.org.uk/discover-wetlands/fun-and-learning/home-learning/>

<https://www.kidsagainstplastic.co.uk/do/plasticcleverschools/>

<https://www.kidsagainstplastic.co.uk/>

<https://www.booksfortopics.com/plastic>

<https://mypura.com/blogs/news/do-baby-wipes-contain-plastic#:~:text=Most%20popular%20baby%20wipes%20contain,last%20up%20to%20100%20years.>

### Evaluation Notes

## Stand-alone objectives to be covered this term

### PE

#### Gymnastics 2

- Identify their strengths and weakness and compose a sequence which will achieve the highest score against criteria.
- Perform increasingly complex sequences
- Compose and practise actions and relate to music.
- Experience flight on and off of apparatus
- Show clarity, fluency, accuracy and consistency in their movements.

- Lead group warm up demonstrating the importance of strength and flexibility.
  - Work independently and in small groups to make up sequences to perform to an audience
  - **Hockey**
  - Choose and implement a range of strategies to attack and defend such as restricting attackers space or goal side marking
  - Suggest, plan and lead a warm up or drill and use STEP technique to modify
  - Make quicker decisions in games (on and off the ball)
  - Use and apply boundary rules such as corners, self pass and sideline in relevant game
  - Build upon set plays such as in tag rugby, some suggest improvements to play
  - Use a variety of techniques for passing, controlling, dribbling and shooting the ball in games
  - Play in a variety of positions (attacking and defensive)
  - Consistently catch/stop and control a ball
  - Able to track and control a rebound from shot (penalty or open play)
- Work collaboratively in a team to play and keep possession of the ball

## Art

### Drawing Unit – Express yourself

**Use experiences, other subjects across the curriculum and ideas as inspiration for artwork.**

**P3** create imaginative work from a variety of sources e.g. observational drawing, music, poetry, other artists

**Develop and share ideas in a sketchbook and in finished products.**

**E3** question and make thoughtful observations about starting points and select ideas for use in their work, recording and annotating in sketchbooks.

**E4** think critically about their art and design work.

**Improve mastery of techniques including drawing, painting and sculpture**

**D2** develop close observational skills.

**D6** begin to develop an awareness of composition, scale and proportion i.e. foreground, middle ground, background.

**Learn about the great artists, architects and designers in history.**

## Music

N/A

## MFL

### Unit: Fruits

Une pomme, Une fraise, Une pêche, Une banana, Une cerise, Une orange, Une prune, Une poire, Un kiwi, Un abricot, Les pommes, Les fraises, Les pêches, Les bananes, Les cerises, Les oranges, Les prunes, Les poires, Les kiwis, Les abricots, J'aime, Je n'aime pas

#### **Speaking**

- Speak aloud familiar words or short phrases.
- *Speak clearly and confidently*
- Use correct pronunciation when speaking and start to see links between pronunciation and spelling.
- Name 10 fruits and say "I like..." and "I don't like..." plus a fruit

#### **Listening**

- Listen and respond to familiar spoken words, phrases and sentences (e.g. simple instructions).
- *Repeat words and phrases modelled by the teacher*
- *Remember a sequence of spoken words*
- *Use physical response, mime and gesture to convey meaning and show understanding.*

Match sound to picture / word / phrase.

#### **Reading**

- Read aloud familiar words or short phrases.
- *Read aloud a familiar sentence, rhyme or poem.*
- Recognise how sounds are represented in written form.
- *Pronounce accurately the most commonly used characters, letters and letter strings*

#### **Writing**

- Write some familiar simple words from memory or using supported written materials (e.g. familiar nouns).
- *Write simple, familiar words using a model*
- *Write some single words from memory.*
- *Create name labels and complete differentiated worksheets*
- Spell all new language as accurately as possible via tasks in each lesson.

#### **Grammar**

- Indefinite article with fruits. How to articulate a simple opinion. "I like..." and "I don't like..." plus the fruit in plural form.

## Cooking in the Curriculum

Mini Victoria Sponges - See cooking curriculum for recipe guidance and skills