



Topic	Art: Power Prints	Theme	Children	Year Group	4
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Key Question	How can we look after our planet for the children of the future?
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### Key skills

#### Generating ideas:

Generate ideas from a range of stimuli, using research and evaluation of techniques to develop their ideas and plan more purposefully for an outcome.

#### Using sketchbooks:

Use sketchbooks for a wider range of purposes, for example, recording things using drawing and annotations, planning and taking the next steps in a making process.

#### Making skills:

Demonstrate greater skill and control when drawing and painting to depict forms, such as showing an awareness of proportion and being able to create 3D effects. Apply observational skills, showing a greater awareness of composition and demonstrating the beginnings of an individual style.

#### Knowledge of artists:

Use subject vocabulary confidently to describe and compare creative works.

#### Evaluating and analysing:

Use more complex vocabulary when discussing their own and others' art.

Collaborate	Work in a group to create a shared artwork
Collage	Cutting, arranging and sticking materials like paper, fabric etc to a background
Composition	Putting different elements together in a pleasing way
Engraving	Lines cut into a hard surface which is covered in ink and printed
Printing technique	Creating prints in different ways e.g. monoprint, block print
Proportion	How big one element of an artwork appears compared to the whole thing
Shading	Drawn marks to illustrate degrees of light and dark
Tone	How light or dark something is
Wax-resist	Using wax to stop another material, like paint, from sticking permanently to a surface

#### Mark making with a pencil



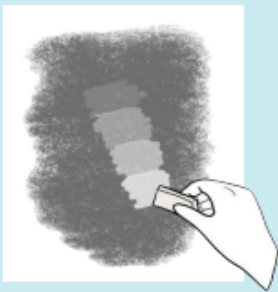
Hatching



Cross-hatching

#### Mark making with charcoal

- Use the tip of the charcoal for sharp lines
- Blend light and dark areas to create tone.
- Use a rubber to draw light tones.



#### Proportion

- Use the relative size and shape of objects to help draw them in proportion.
- Artists use proportion to help make drawings look realistic.
- Artists can exaggerate proportion to draw attention to one aspect of an artwork.



#### Creating contrast

Patterns

Textures

Light and dark



#### Block printing

- Draw your design on the polystyrene block, pressing in with the pencil
- Don't press too hard!
- Apply ink or paint to the block
- Press the block ink-side down to print it



#### Henri Matisse

- Painted with bold shapes and colours in the 'Fauvist' style.
- Made paper cut-outs when he could no longer stand up to paint.
- He called his collage style 'Painting with scissors'.



#### Artists

Georges Seurat

Ed Ruscha

Fernando Botero

Alberto  
Giacometti

Henry Moore

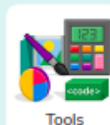


Topic	Computing: Coding	Theme	Children	Year Group	4
Key Question	How can we look after our planet for the children of the future?				

### Key Learning

- To begin to understand selection in computer programming.
- To understand how an IF statement works.
- To understand how to use co-ordinates in computer programming.
- To understand the 'repeat until' command.
- To understand how an IF/ELSE statement works.
- To understand what a variable is in programming.
- To use a number variable.
- To create a playable game.

### Key Resources



Tools



2Dos



2Chart



Free code gibbon

### Key Images



Design

Open design mode in 2Code.



Exit Design

Switch to code mode in 2Code.



change variable

A change variable block.



if equals then

else

An 'if/else' command.



repeat until equals

repeat until

Repeat until.



create number

number

Select the type of variable

number

string

function

Creating a variable in 2Code.

### Key Vocabulary

#### Action

The way that objects change when programmed to do so. For example, move or change a property.

#### Alert

This is a type of output. It shows a pop up of text on the screen.

#### Algorithm

A precise, step-by-step set of instructions used to solve a problem or achieve an objective.

#### Button

A type of object that responds to being clicked on.

#### Code blocks

A way to write code using blocks which each have an object or an action. Each group of blocks will run when a specific condition is met or when an event occurs.

#### Background

In 2Code the background is an image in the design that does not change.

#### Command

A single instruction in 2Code.

#### Debug/Debugging

Fixing code that has errors so that the code will run the way it was designed to.

#### Design

In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.

#### 'If' Statement

A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.

#### Properties

These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.

#### Execute

This is the proper word for when you run the code. We say, 'the program (or code) executes.'

#### Predict

Use your understanding of a situation to say what will happen in the future or will be a consequence of something.

#### Input

Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.

#### Timer

In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.

#### Selection

Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.

#### Flowchart

A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.

#### Event

An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (when Key) or clicking or swiping the screen (when Clicked, when Swiped). In 2Code, the event commands are used to create blocks of code that are run when events happen.

#### Prompt

A question or request asked in coding to obtain information from the user in order to select which code to run.

#### Sequence

This is when a computer program runs commands in order.

#### Nest

When coding commands are put inside other commands. These commands only run when the outer command runs.

#### 'If/Else' Statement

A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.

#### Variable

A named area in computer memory. A variable has a name and a value. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

#### Implement

When a design is turned into a program using coding.

#### Object

Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.

#### Repeat

This command can be used to make a block of commands run a set number of times or forever.

#### Repeat until

In 2Code this command will repeat a block of commands until a condition is met.

#### Run

Clicking the Play button to make the computer respond to the code.



Topic	RE	Theme	Children	Year Group	4
Key Question	What is the 'Trinity' and why is it important for Christians?				

### Outcomes

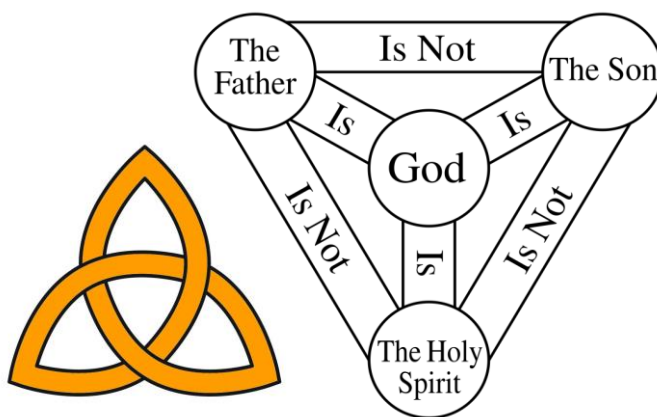
- Identify John 1 as part of a 'Gospel', noting some differences between John and the other Gospels.
- Offer suggestions for what texts about God might mean.
- Give examples of what the texts studied mean to some Christians.
- Describe how Christians show their beliefs about God and the Trinity in the way they live.
- Make links between some of the texts and teachings about God in the Bible and what people believe about God in the world today, expressing some ideas of their own clearly.

### Key Vocabulary

Baptism	A ceremony that symbolises a commitment to living a life as a Christian.
Belief	The feeling of being certain that something exists or is true
Bible	The Christian holy book. It is separated into the Old Testament and the New Testament.
Christianity	A religion focussed on the life and teachings of Jesus Christ, who Christians believe to be the Son of God.
Christians	A follower of Christianity.
Gospel	Four books of the Bible found at the start of the New Testament that tell the stories of Jesus' life.
Holy Spirit	The Holy Spirit is the Love between God the Father and God the Son
Holy Trinity	A way of describing God the Father, God the Son and God the Holy Spirit. God is three-in-one.
Incarnation	The earthly form of a god or spirit.
Prayer	A way to communicate with God.
Worship	Showing words, thoughts and actions about how great God is.

### What is the Trinity?

- **Christians** believe God is **Trinity**: Father, Son and **Holy Spirit**. This is called the **Holy Trinity**.
- The **Holy Trinity** symbol demonstrates the three parts of God being equal and intertwined with no beginning or end.
- Christians believe The Father creates; he sends the Son who saves his people; the Son sends the Holy Spirit to his followers.
- Christians find that understanding God is challenging; people spend their whole lives learning more and more about God.
- Christians really want to try to understand God better and so try to describe God using symbols, similes and metaphors, in song, story, poems and art.
- Christians **worship** God as **Trinity**. It is a huge idea to grasp and **Christians** have created art to help to express this **belief**.
- Christians believe the **Holy Spirit** is God's power at work in the world and in their lives today, enabling them to follow Jesus.



### God the Father

God the Father is absolute holiness and goodness. Just as an earthly father would care for his children, God the Father cares for all people on Earth.



### God the Son

God the Son is God in human form. This is called **incarnation**. Part of God became human when Jesus came to Earth.



### God the Holy Spirit

The **Holy Spirit** is the part of God that is living inside **Christians**. It is God's power at work on Earth. **Christians** believe that the **Holy Spirit** guides them and reveals God's nature to them.







Topic	Science: Living things and their habitats	Theme	Children	Year Group	4
Key Question	How can we look after our planet for the children of the future?				

### What should I already know?

- Animals can be grouped into **vertebrates** (and then further into fish, reptiles, amphibians, birds and mammals) and **invertebrates**
- Animals can be grouped into **carnivores**, **herbivores** and **omnivores**
- The differences between the teeth of **carnivores** and **herbivores**.
- The names of some common wild and garden plants and **deciduous** and **evergreen** trees.
- Examples of **habitats** (including **microhabitats**) and the animals and plants that can be found there.
- Living things depend on each other to **survive**.
- How **food chains** and food webs work.
- How land use has changed over time and the effects this has on the **environment** (e.g. **urban** development)

### Vocabulary

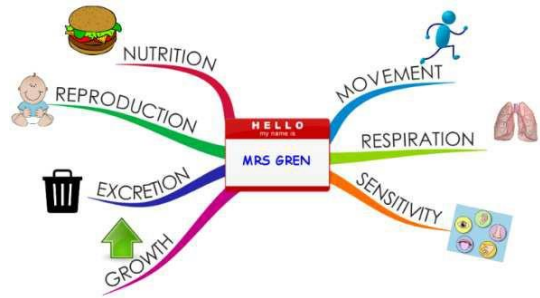
biomes	a natural area of <b>vegetation</b> and animals
carnivore	an animal that eats meat
classification key	a system which divides things into groups or types
criteria	a factor on which something is judged
deciduous	trees that lose leaves in the autumn every year
environment	all the circumstances, people, things, and events around them that influence their life
evergreen	a tree or bush which has green leaves all the year round
excretion	the process of eliminating waste from the body
food chain	a series of living things which are linked to each other because each thing feeds on the one next to it in the series
habitat	the natural <b>environment</b> in which an animal or <b>plant</b> normally lives or grows
herbivore	an animal that only eats plants
invertebrate	a creature that does not have a spine, for example an insect, a worm, or an octopus
Life processes	There are seven processes that tell us that living things are alive
microhabitat	a small part of the <b>environment</b> that supports a <b>habitat</b> , such as a fallen log in a forest
minibeast	a small <b>invertebrate</b> animal such as an insect or spider
nutrition	the process of taking food into the body and absorbing the nutrients in those foods
omnivore	person or animal eats all kinds of food, including both meat and <b>plants</b>
organism	a living thing
reproduction	when an animal or plant produces one or more individuals similar to itself
respiration	process of respiring; breathing ; inhaling and exhaling air
sensitivity	responding to the external environment
urban	belonging to, or relating to, a town or city
vegetation	<b>plants</b> , trees and flowers
vertebrate	a creature which has a spine

### What will I know by the end of the unit?

#### How can living things be grouped?

All living things, which can also be called **organisms**, have to do certain things to stay alive. These are the **life processes**:

- movement
- **respiration**
- **sensitivity**
- growth
- **reproduction**
- **excretion**
- **Nutrition**



Living things can be grouped according to different **criteria** (where they live, what type of **organism** they are, what features they have). For example, a camel can belong in a group of **vertebrates**, a group of animals that live in the desert, and a group of animals that have four legs.

#### What is a classification key?

A **classification key** is a tool that is used to group living things to help us identify them.



#### How can environments change?

**Habitats** can change throughout the year and this can have an effect on the plants and animals that live there.

Humans can have positive and negative effects on the environment:

- positive effects: nature reserves, ecological parks
- negative effects: litter, **urban** development

### Investigate!

- Complete Venn diagrams to show if living things can be grouped into two or more groups .
- Use criteria to sort living things in a Carroll diagram.
- Sort vertebrate and invertebrate animals into groups, describing their key features. Use a classification key to identify which group of vertebrates animals belong to and then create your own.
- Sort plants into groups (e.g. flowering plants and non-flowering plants) and then create a classification key to help others identify plants.
- Carefully observe minibeasts in a microhabitat and use a classification key to identify them.
- Use simple computer software programmes to create a branching classification key.
- Explore examples of human impact (both positive and negative) on environments.