



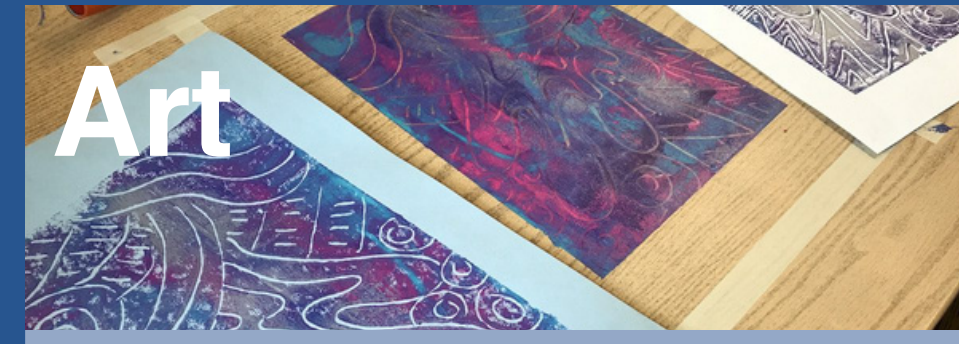
# Y3/4 Spring 2

## Rivers

Linked Texts: Cinderella of the Nile, Pebble in my Pocket, Rivers: An incredible journey from source to sea

**Trips and visits:**  
**Field Work at Pendarves Wood**

Wild Tribe link: Geography and science



**Intent:** Children learn about rivers in the local environment and around the world. They use maps and atlases to look at rivers and learn about the key aspects of rivers. Children learn about how rivers are used around the world and learn about famous rivers.

**Skills and Knowledge**  
describe and understand key aspects of rivers use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

**Sticky Knowledge:**  
I can explain the stages and features of a river  
I can explain how rivers are used in the UK and around the world  
I can name local rivers and famous rivers around the world  
I can give facts about the River Nile

**Vocabulary:** river, coast, confluence, delta, estuary, meander, settlement, source, transport, flooding, dam, tributary, map, atlas, energy,

**Subject composite:** Children track a river from the mouth to towards the source. Children undertake fieldwork.

**Impact:** Children have an understanding of the key aspects of rivers and how they are used across the world. They will name and locate key rivers around the world.

**Intent:** Children learn about light for the first time. Children explore the difference between natural and artificial sources of light. Children learn about the sun and how to keep sun safe. Children learn very simple how we see and explore shadows and how they are made.

**Skills and Knowledge**  
Recognise that they need light in order to see things and that dark is the absence of light  
Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.  
Notice that light is reflected from surfaces  
Recognise that shadows are formed when the light from a light source is blocked by an opaque object  
Find patterns in the way that the size of shadows change  
Working scientifically - identifying differences, similarities or changes related to simple scientific ideas and processes  
Working scientifically - recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.  
Working scientifically - gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.  
Working scientifically 0 asking relevant questions and using different types of scientific enquiries to answer them.  
Working scientifically - setting up simple practical enquiries, comparative and fair tests

**Sticky Knowledge:**  
Humans and other animals need light to see  
The sun is a natural light source  
Without the sun living things would not be able to live and grow on planet earth  
Light from the sun can be dangerous and there are ways to protect your eyes from the sun  
Light travels from a light source to an object  
Reflection is the return of light from a material or surface and is reflected into our eyes  
Shadows are formed when a light from a light source is blocked by an object

**Vocabulary:** light, eyes, light sources, natural light sources, artificial light sources, sun, sunglasses, protect, reflection, shiny, dull, opaque, translucent, transparent, shadow, independent variable, dependent variable, controlled variables, distance, conclusion, evaluation

**Subject composite:** Children experiment with shadows and can explain how they are formed.

**Impact:** . Children understand more about the world around them. They understand how they see and how to keep themselves safe in the sun.

**Intent:** children design and create accurate print designs. They use acetate to create monotype prints. Children explore using 2 or 3 different colours to print on their acetate and explore how these blend or contrast. Children explore using stencils or found objects to create negative space on their prints. Children explore printing onto different materials and types of paper e.g tissue paper, fabric, newspaper

**Skills and Knowledge:**  
Use sketch books to record their observations and use them to review and revisit idea.  
To develop mastery in printing and demonstrate increased control.  
Learn about great artists

**Sticky Knowledge:**  
William Morris is a famous print artists who is known for creating nature inspired wallpaper.  
I know a monoprint is a single unique print  
I know artists can be inspired by the world around them.  
I know that I can refine my ideas and reflect on my work and this is how I become a more skilled artist  
I know that I can mix printing inks to create a range of colours and I can use more than 1 colour on a printing plate.

**Vocabulary:** monoprint, acetate, printing plate, William Morris, Lou Tonkin, printing ink, transferring, press, detail, adjust, blend, paper type, layering, paper choice, blank space, final piece, repeat, effects

**Subject composite:** Children create final pieces inspired by either William Morris or Lou Tonkin using the skills they have learnt through the lessons.

**Impact:** Children become more confident print makers. They hone skills and add detail to their work. They justify the artistic choices they make.

**Intent:** Children use micro-bits to create devices to monitor fitness. In the Fitness friend activity students create a simple wearable device to give regular reminders to do some exercise. In the Heart rate monitor activity students learn how to measure their heart rate and create a prototype of a heart rate monitor. In the Walking for water activity students learn how some children have a daily walk for water and create a step counter to track their steps.

**Skills and Knowledge**  
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design  
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work  
Apply their understanding of computing to program, monitor and control their products

**Sticky Knowledge:**  
A micro:bit is a pocket sized computer.  
A micro:bit has an LED light display, buttons, microphone, sensors and many features.  
A micro:bit can be programmed for a specific use.

**Vocabulary:** micro-bit, algorithm, debug, input output, purpose, sequence, control, Bluetooth, flashing, LED, microphone, processor, touch sensor, USB, error code

**Subject composite:** Children create a heart rate monitor using the micro-bit

**Impact:** Children experience programming for a real purpose.