

# Hobbs Hill Wood Primary School

Knowledge Organiser for  
Year 4 – Summer 2,  
ART

Henri Rousseau – Tiger in a Tropical Storm



'Inspiring confident and independent learners'

## Knowledge Organiser for

### Knowledge

#### Explore:

- Explore the role and impact of Henri Rousseau
- Investigate Rousseau's artwork, practising the patterns and features of his work
- To learn about the life and works of Rousseau.
- To discuss likes and dislikes of various works of Rousseau.
- To compare and contrast art work painted by Rousseau.

#### Create:

- Practising the patterns and features of his work
- Practise creating man-made & natural patterns using colouring pencils.
- To improve skills of painting with a clear sense of mixing colours.
- To create an imitation of Tiger in a Tropical Storm

#### Improvise:

- Develop techniques to produce patterns using leaves along with 'natural' background patterns
- To develop layering techniques to create a background
- To use pastels to blend different varying shades of colours
- To compare the marks made by chalks, oil pastels and paints and apply their knowledge to choose an appropriate medium to create a self-portrait.

#### Present:

- A Henri Rousseau inspired piece of art work, imitating his famous painting, Tiger in a Tropical Storm.

#### Evaluate:

- Improve their mastery of art by focussing on further detail or a different style
- The child can use a sketchbook to show how ideas have been improved.
- Layer colours to create depth of colour and tone.
- The child can use pens or the tip to create detail

### Skills

- Use colouring pencils effectively to create tone and detail
- Use shading to add interesting effects to drawings, using different grades of pencil.
- Use a sketchbook to show how ideas have been improved; review and revisit.
- Choose a suitable format to work with: Portrait or Landscape.
- Improve their mastery of art and design techniques, including drawing.
- Painting and sculpture with a range of materials.
- Use hard and soft lines to record detail in the distance, foreground.
- Use blending and overlaying colours to create soft backgrounds.
- Use pens or their own choice of medium to record minute detail.
- Use blending and mixing to create various shades inspired by famous artists.
- Select appropriate size brushes to layer detail.
- Investigate the effect of wax with water colour paints.
- Evaluate and analyse creative works using the language of art, craft and design.



# Hobbs Hill Wood Primary School

## Knowledge Organiser for Summer Computing Year 4 Unit 4.5 – We are Artists



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### Knowledge Organiser for computing

#### Knowledge

##### In this unit, pupils will learn to:

- Develop an appreciation of the links between Geometry and art
- become familiar with the tools and techniques Of a vector graphics package
- develop an understanding of turtle graphics
- experiment with the tools available, refining And developing their work as they apply Their own criteria to evaluate it, and receive Feedback from their peers

##### Key Vocabulary:

**Abstraction:** a process of managing complexity by setting to the side irrelevant detail and concentrating on function rather than form

**Bitmap:** an image represented by a large, rectangular grid of pixels, each having its own colour value, typically in the range 0 to 255 for each of red, blue and green

**Fractal:** a self-similar repeating (or almost repeating) structure in which ever greater detail becomes apparent as the structure is examined more closely

**Pixel:** picture element – one of the small, square dots that makes up a digital image

**Repetition:** programming construct which allows a group of instructions to be repeated a number of times, or until a certain condition is met

**Sprite:** a graphical character in a program that can be given its own sequence of instructions

**Tessellation:** a regular pattern of one shape that fills a space without overlapping or leaving spaces between

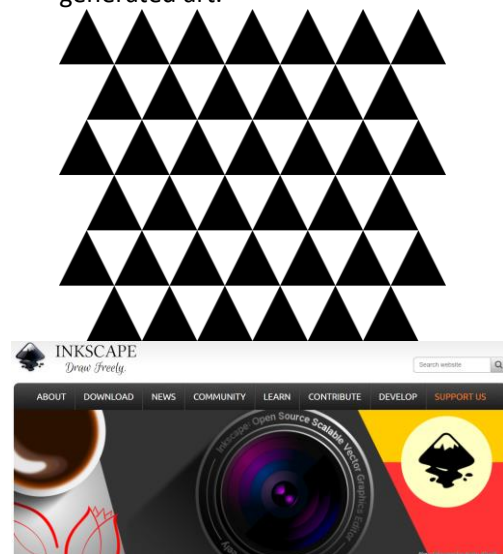
**Transform:** to change the shape of an image or part of an image

**Turtle:** a small floor robot (or a representation of one on screen) that draws by moving forward and turning, under the control of a program, for example in Logo or Scratch's pen commands

**Vector graphics:** a way of representing an image by specifying the

#### Skills

- Develop an appreciation of the links between geometry and art
- Become familiar with the tools and techniques of a vector graphics package
- Develop an understanding of turtle graphics
- Experiment with the tools available, refining and developing their work as they apply their own criteria to evaluate it, and receive feedback from their peers
- Develop some awareness of computer-generated art.



# Hobbs Hill Wood Primary School

Knowledge Organiser for  
Year 4 – Summer 1,  
Subject- Design and Technology  
Topic- Water Cycle pop up books



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## Knowledge Organiser for

### Knowledge

- understand how the water cycle works and how it impacts everyday life
- know how to use the features of existing products to help design new products with an increasing amount of detail
- understand that ideas need to be realistic and take into account the properties of available materials and the intended use of the product
- To know the function, properties and aesthetic qualities of a wide range of materials
- Know how to use a range of tools and materials safely and combine these to create strong, purposeful prototypes
- To know what 'good quality prototype' is and how to adapt and refine original design ideas
- To know how to use design criteria to evaluate and improve their products.
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### Key vocabulary

Mechanism – A system of part working together

Rotary – is a motion revolving around a centre or axis

Pull Mechanism- a push pull motion

Pop-up book- A book with 3D pages

Internal – situated inside

Risk assessment – process involving evaluating the potential risks involved.



### Skills

- Generate, develop, model and communicate their ideas through discussion, annotated sketches and cross-sectional diagrams
- Investigate and analyse a range of existing products
- Use a range of techniques such as cutting, scoring, folding and joining to produce working mechanisms
- Apply their understanding of how to create different sorts of movement using mechanisms
- Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities
- 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
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work



# Hobbs Hill Wood Primary School

## Knowledge Organiser for

### Year 4

## Geography

### Rivers, water-cycle and coasts



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#### Knowledge

- To know and understand what the water cycle is
- To understand the journey water takes from a source to the sea.
- To know and understand how the land is shaped by rivers
- To know the wildlife found in rivers
- To identify famous rivers in the UK and around the world
- To understand how Rivers were used in the past for transportation
- To know and understand what the coast is

#### Key Vocabulary:

**Channel** – a stretch of water that is safe for ships

**Condensation** – when a gas cools and turns into a liquid

**Confluence** – where two streams or rivers join **Deposition** – when water “drops off” the rock, sand and soil it is carrying along

**Drainage basin** – an area of land where rainwater runs into a river and its tributaries

**Erosion** – when rock is broken down into small bits or worn away by water or the wind

**Estuary** – the really wide part of a river where it joins the sea

**Evaporation** – when a liquid is heated up and turns into a gas

**Precipitation** – rain, snow or hail that falls to the ground

**Reservoir** – a natural or man-made source of water

**Sediment** – the rock, sand, soil that is carried in the rivers

**Tributary** – a small river or stream which flows into a larger one

**Water cycle** – the cycle of water between the Earth's oceans, sky and land

**Water vapour** – the name of water when it's a gas



#### Skills

##### **Geographical skills and fieldwork**

- use maps, atlases, globes and digital/computer mapping to describe features studied
- use the eight points of a compass, four and six-figure grid references and symbols.
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including maps, plans and graphs, and digital technologies.

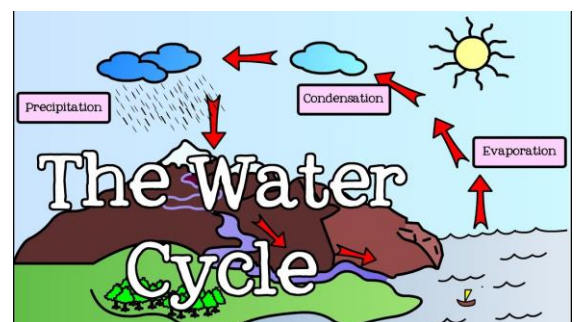
##### **Human and physical geography**

Describe and understand key aspects of:

- physical geography, including: rivers, mountains and the water cycle
- human geography, including: land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
- Understand key topographical features including rivers and land use patterns and how some of these aspects have changed over time

##### **Locational knowledge**

- name and locate counties and cities, geographical regions and their identifying human and physical characteristics, key features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time



# Hobbs Hill Wood Primary School

Knowledge Organiser for  
Year 4 – Summer 2,  
Science,  
The Big Build!



'Inspiring confident and independent learners'

## Knowledge Organiser for

### Knowledge

- To know and understand what an architect is
- To know and understand what an engineer is
- To identify famous structures
- To understand how something is built (buildings, towers, bridges)
- To understand the importance of shape when building.
- To understand the different types of bridges and how they have changed over history
- To understand how different materials stretch
- To understand the different uses of materials and why
- To investigate animals as builders and how they build

### Key Vocabulary:

**Structure** – something built from different parts

**Tower** – a structure that is much taller than it is wide

**Bridge** – a structure carrying a road, path, railway, etc. across a river, road, or other obstacle

**Engineer** – a person who designs, builds, or maintains engines, machines, or structures.

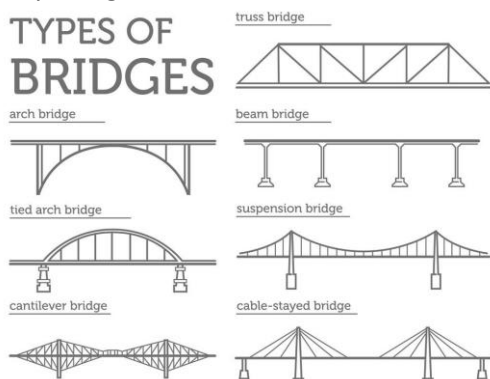
**Architect** – a person who designs buildings and in many cases also supervises their construction.

**Materials** – the matter from which things can be made.

**Construct** – build or make something.

**Construction** – the action of building something, typically a large structure.

### TYPES OF BRIDGES



### Skills

- To ask relevant questions and use different types of scientific enquiries to answer them.
- Set up simple practical enquiries, comparative and fair tests.
- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Gather, record, classify and present data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Identify differences, similarities or changes related to simple scientific ideas and processes.
- Use straightforward scientific evidence to answer questions or to support their findings.

