

# The World of Water

Terms 3 and 4

#### The final showdown!

Water paintings

Making a 3d model of a river, from source to sea

### The BIG Questions...

Where does our water come from and what happens in the water cycle?

How do rivers change along their course?

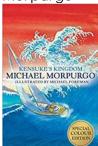
Suggested artist... Hokusai (Japan, 1760-1849)



Suggested themes... The water cycle River features Human use of rivers

#### Lead story and others... 'Kensuke's Kingdom' - Michael

Morpurgo



# Opportunities for visits, visitors and outdoor learning...

- Sketching at the school pond as part of Water study.
- Fieldwork in school grounds

# Key Skills and Knowledge

## Geography

As geographers we will...

- Locate the world's countries, using maps to focus on Europe concentrating on their countries, and major cities.
- Name and locate counties and cities of the United Kingdom, key topographical features (including rivers).
- Describe and understand key aspects of >physical geography, including: rivers and the water cycle
  - >human geography, including: types of settlement and land use, economic activity and the distribution of natural resources including water.
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- Use symbols and key (including the use of Ordnance Survey maps) to build knowledge of the United Kingdom and the wider world.

#### Possible activities

Make a glossary of water cycle words. Label diagrams. Make own water cycle with sealable plastic bags containing water, hung on the window. Use a Water Cycle kit to simulate the water cycle. Use atlases to locate some major rivers of the world. Draw and label water symbols found on maps. Find out about the changing features of a river over its 3 courses. Make a glossary. Make a 3d model, using card and tissue paper. Label key features. Make a leaflet about how the River Thames changes over its course. Find out about the River Amazon. Label photographs showing erosion and deposition. Make a chart/poster to show some of the ways in which people use rivers and the effects of these uses.

#### Science

As scientists we will learn...

#### Forces (Continued)

- To identify the effects of air resistance, water resistance and friction, that act between moving surfaces.
- To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

#### <u>Properties and Changes of Materials</u>

- To compare and group together everyday materials on the basis of their properties, including hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets.
- To know that some materials will dissolve in liquids to form a solution and describe how to recover a substance from a solution.
- To give reasons based on comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.

#### Work Scientifically

- To plan different types of scientific enquiries to answer questions including recognising and controlling variables where necessary.
- To take measurements using a range of scientific equipment with increasing accuracy and precision taking repeat readings when appropriate.
- To record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- To use test results to make predictions to set up further comparative and fair tests.
- To report and present findings from enquiries including conclusions, relationships and explanations of and degree of trust in results in oral and written forms such as displays and other presentations
- To identify scientific evidence that has been used to support or refute ideas or arguments.
- To explore and talk about their ideas; asking their own questions about scientific phenomena and analysing function, relationships and interactions more systematically.
- To recognise that scientific ideas change and develop over time.
- To draw conclusions based on their data and observations, use evidence to justify their ideas and use their scientific knowledge and understanding to explain their findings.
- To read, spell and pronounce scientific vocabulary correctly.

Compare friction of a toy car moving down a ramp on different surfaces.

Use a kit to investigate the effects of gears and find out examples in everyday life.

Find examples of how pulleys and levers can be used to allow a greater force.

Thermal insulation fair test. Dissolving sugar or salt at different temperatures. Create a line graph.

**PSHF** 

As Wentworth citizens we will... Relationships Circle time and class discussion. Listen and discuss story situations.

	Factor and an attended	
	<ul> <li>Recognise and respond appropriately to a wider range of feelings in others.</li> <li>Healthy Relationships</li> <li>Learn that our actions affect ourselves and others.</li> <li>Work collaboratively towards shared goals.</li> <li>Develop strategies to solve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as ourselves.</li> <li>Valuing Differences</li> <li>Listen and respond respectfully towards a wide range of people, feel confident to raise our concerns, recognise and care about other people's feelings, and try to see, respect and if necessary constructively challenge, their points of view.</li> </ul>	
D.T.	<ul> <li>As designers we will</li> <li>Generate ideas through brainstorming and identify a purpose for our product</li> <li>Draw up a specification for design</li> <li>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes</li> <li>Weigh and measure accurately (time, dry ingredients, liquids)</li> <li>Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens</li> <li>Evaluate a product against the original design specification</li> <li>Evaluate it personally and seek evaluation from others</li> </ul>	Rules - Food hygiene and safe practices for cooking Cooking biscuits Evaluate
R.E.	<ul> <li>As religious scholars we will</li> <li>Outline Jesus' teachings on how his followers should live.</li> <li>Offer interpretations of two of Jesus' parables and say what they might teach Christians about how to live</li> <li>Explain our own understanding of what Jesus would do in relation to a moral dilemma from the world today.</li> </ul>	Kent RE Syllabus (U2.2) Key question: What would Jesus do? Can people live by the values of Jesus in the 21st century? Look at and comment on Bible quotations. Offer own ideas. Read, listen to and discuss parables. Drama role play. Forgiveness scenarios.
Art	<ul> <li>As artists we will</li> <li>Create and use different tones of one colour, lightening and darkening by using different colours. • Use colour for purpose e.g. to express mood and feelings.</li> <li>Apply different effects and textures with a purpose in mind e.g. washes and thickened paint. • Mix and match colours to create atmosphere. • Mix colour, shades and tones with confidence building on previous knowledge. • Start to develop own style using different tones and mixed media.</li> <li>Develop simple perspective in work</li> </ul>	Make links to the artwork on the front cover of 'Kensuke's Kingdom' book. Look at and discuss a range of pictures by the artist Hokusai featuring water. Sketch lines and use rolled tissue paper to create an effect of water movement. Use paints to develop own water-themed paintings inspired by these.
Computing	As computing technicians we will learn <u>Computer Science</u> <u>Control including</u>	Explore flowcharts and symbols.

	<ul> <li>Use a computer to control a physical object.         <ul> <li>Use recognised symbols for flowcharts.</li> </ul> </li> <li>Digital Literacy         <ul> <li>Use Microsoft Excel including</li> <li>Use Σ to create a sum</li> <li>Use average formula</li> </ul> </li> </ul>	Create a spreadsheet.
British Values	As Wentworth citizens we will learn  Tolerance of others including religion  Mutual respect  Rule of law Individual liberty  Democracy	PSHE lessons and cross-curricular Examples: RE – different faiths and religions  PE – respecting opposition MFL –respect for others who speak differently.  Computing DT – following instructions PE – Accepting the decision of the referee.  Vote for House Captains
P.E.	As sports stars we will  Dance  Compose own dances in a creative way. Perform to an accompaniment, showing clarity, fluency, accuracy and consistency. Develop movement using; Actions (WHAT); travel, turn, gesture, jump, stillness Space (WHERE); formation, direction, level, pathways Relationships (WHO); solo/duo/trio, unison/canon/contrast Dynamics (HOW) explore speed, energy (e.g. heavy/light, flowing/sudden)  Gymnastics  Make complex extended sequences. Combine action, balance and shape. Perform consistently to different audiences. Create a sequence of up to 8 elements: (e.g. a combination of asymmetrical shapes and balances and symmetrical rolling and jumping actions; changes of direction and level and show mirroring; and matching shapes and balances. Perform balances with control, showing good body tension. Mirror and match partner's balance i.e. making the same shape on a different level or in a different place. Explore symmetrical and asymmetrical balances on our own and with a partner.	The Greatest Showman - 'This Is Me' (film/theatre)  'Bridges' theme

	<ul> <li>Explore and develop control in taking some/all of a partner's weight using counter balance (pushing against) and</li> <li>Counter tension (pulling away from).</li> <li>Explore different starting and finishing positions when rolling e.g. forward roll from a straddle position on feet and end in a straddle position on floor or feet/begin a backward roll from standing in a straight position, ending in a straddle position on feet.</li> <li>Games</li> <li>Gain possession by working in a team. pass in different ways.</li> <li>Choose a tactic for defending and attacking.</li> <li>Use a number of techniques to pass, dribble and shoot.</li> </ul>	Team games and skills involving Kicking Shiny/ hockey
Music	As musicians we will learn  Listening  Describe the structure of what we can hear in musical excerpts (live and recorded).  Compare different styles of music, identifying similarities and differences with increasingly complex language.  Accurately name instruments we can hear and the family of instruments they belong to.  Appraising  Say what went well using musical language and suggest two ways to improve when listening to live performances and compositions.  Composing: Singing, Body Percussion and Percussion Instruments  Create sophisticated soundscapes in response to a brief.  Compose music to a pulse and select appropriate rhythms.  Compose music to a pulse either in groups or as a whole class.  Performing: Playing Instruments  Know and be able to demonstrate the correct playing technique for all classroom percussion instruments and demonstrate this at all times.  Understand that performances start and end in silence and show a high level of	Listen to and discuss water theme music. Use percussion instruments for effect. Create and perform class and group compositions. Perform and evaluate.
P.F.L.	<ul> <li>Make simple sentences, and short texts.</li> <li>Write words, phrases and short sentences, using a reference.</li> </ul>	French - Use of La Jolie Ronde and Linguascope Units about: The High Street (continued) Keeping fit/ hobbies

 Write simple words and phrases using a model and some words from memory.

#### Intercultural understanding

- Look at further aspects of our everyday lives from the perspective of someone from another country.
- Recognise similarities and differences between places.
- Compare symbols, objects or products which represent our own culture with those of another country.

#### Knowledge about Language

- Recognise patterns in simple sentences.
- Manipulate language by changing an element in a sentence.
- Apply knowledge of rules when building sentences.
- Develop accuracy in pronunciation and intonation.
- Understand and use negatives.
- Appreciate that different languages use different writing conventions.
- Recognise the typical conventions of word order in the foreign language.
- Understand that words will not always have a direct equivalent in the language.
- Notice different text types and deal with authentic texts.