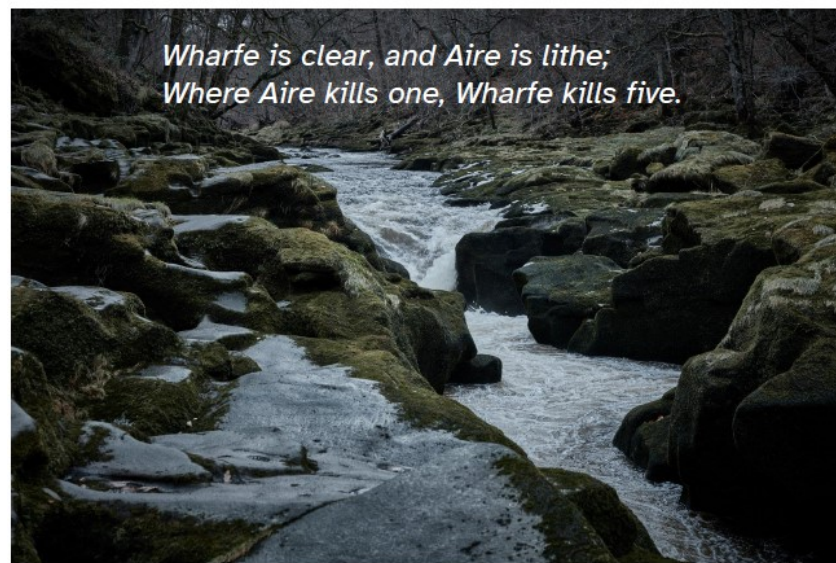
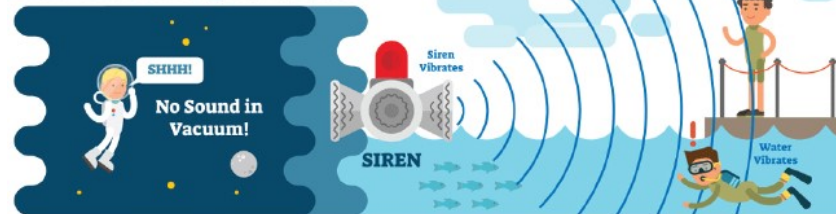


# Waves, flows & vibrations




Sound Waves are Longitudinal Waves



# Waves, flows and vibrations

Year: 4

Term: Spring Term 1

Tier 1 (known words)	Tier 2 (Sentence and visual)	Tier 3 (Specialist words)
<div>Water</div> <div>River</div> <div>Stream</div> <div>Beach</div> <div>Pebble</div> <div></div> <div>Volume</div> <div>High</div> <div>Low</div> <div>Loud</div> <div>Quiet</div>	<div><p><b><i>Tributary:</i></b> A <b><i>tributary</i></b> is a river or stream flowing into a larger river or lake.</p></div> <div><p><b><i>Source:</i></b> A <b><i>source</i></b> is the place where a river begins.</p></div> <div><p><b><i>Mouth:</i></b>The place where a river enters a lake, larger river, or the ocean is called its <b><i>mouth</i></b>.</p></div> <div><p><b><u>Particles:</u></b> Sound travels better through solids because the vibrating <b><i>particles</i></b> are closer together.</p></div> <div><p><b><u>Vibrations and pitch:</u></b> The faster the <b><i>vibrations</i></b>, the higher the <b><i>pitch</i></b></p></div>	<div><p><b><u>Geography</u></b></p><p>Basin/bank/confluence/current/dam/delta/estuary/gorge/meander/gorge/floodplain/erosion/course/rapids/oxbow lake/lower course/middle course/upper course</p></div> <div><p><b><u>Science</u></b></p><p>Soundproof/amplitude/eardrum/absorb/vacuum/distance</p></div>



## English (The Wind in the Willows) - Final outcome Biography

### Reading:

- Use knowledge of root words to understand meanings of words
- Use prefixes to understand meanings
- Use suffixes to understand meanings of nouns
- Read and understand selected words from the Year 4 list.
- Identify, discuss and collect favourite words and phrases which capture the reader's interest and imagination in poetry and narrative texts
- Identify key vocabulary and discuss possible meanings.
- Use the first three letters to locate words in a dictionary.
- Use punctuation to determine intonation and expression when reading aloud to a range of audiences
- Make predictions from different parts of the story, based on information stated
- Draw inferences around characters' actions and justify with evidence from the text.
- Identify the main idea from one paragraph and summarise orally
- Prepare for research by identifying what is already known, generate key questions to structure the task
- Evaluate how specific information is organised within a non-fiction text
- Locate features of information texts in print and on screen.
- Participate in discussion about what is read to them and books they have read independently
- Make and respond to contributions in a variety of group situations

### Writing :

- Create and use sentences with an adverb starter
- Create sentences with fronted adverbials for when and where
- Use inverted commas to punctuate direct speech
- Identify, select and effectively use pronouns
- Use nouns for precision,
- Explore, identify and use Standard English verb inflections in writing
- Identify and discuss the purpose and audience of the writing
- Discuss and record ideas for planning
- Develop characterisation using action, dialogue and description.
- Improvise and compose dialogue between two characters.
- Use paragraphs to organise writing
- Link ideas across paragraphs using fronted adverbials for when and where

## Maths (Red Rose Maths)

Unit 9—Place Value  
Unit 10— Multiplication  
Unit 11—Division  
Unit 12—Addition and Subtraction  
Unit 13 Fractions

## R.E (unit) - Lancashire Agreed Syllabus

### Hinduism

*What might a Hindu learn from celebrating Diwali?*

## Science (Objectives) – Sound

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases

### Skills:

**Questioning:** *Asking relevant questions and using different types of scientific enquires to answer them*

**Planning:** *Setting up simple, practical enquires, comparative and fair tests*

**Measuring:** *Making systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and dataloggers*

**Recording:** *Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions*

**Presenting:** *Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables*

**Concluding:** *Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions*

**Evaluating:** *Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions*

**Identifying differences, similarities or changes related to simple scientific ideas and processes**

**Using straightforward scientific evidence to answer questions or support their findings**

## Humanities (Geography)

Human and physical geography: Use geographical language to identify and explain some aspects of human and physical features and patterns

Describe how features and places change and the links between people and environments.

Geographical Skills: Enquiry and Investigation: Ask and respond to more searching geographical questions including 'how?' and 'why?'

Identify and describe similarities, differences and patterns when investigating different places, environments and people.

Geographical Skills: Fieldwork: Observe, record, and explain physical and human features of the environment.

Map skills

Direction/Location: • Use 4 compass points well: • Begin to use 8 compass points; • Use letter/no. co-ordinates to locate features on a map confidently

Drawing maps: • Make a map of a short route experienced, with features in correct order; • Make a simple scale drawing.

Representation: • Know why a key is needed. • Begin to recognise symbols on an OS map

Using maps: • Locate places on large scale maps, (e.g. Find UK or India on a globe) • Follow a route on a large scale map.

## Arts

### Art: Kandinsky/abstract shapes and colours

• Experiment with different effects and textures including blocking in colour, washes, thickened paint creating textural effects.

• Work on a range of scales e.g. thin brush on small picture etc.

• Create different effects and textures with paint according to what they need for the task.

• Experiment with ways in which surface detail can be added to drawings.

• Use journals to collect and record visual information from different sources.

• Draw for a sustained period of time at an appropriate level.

### Music (Unit)

• Sing Up—Sound Symmetry

• Sing Up—My Fantasy Football Team

## Computing (NCCE units)

eSafety (Week 1) : Project evolve - Managing online information

Unit 3 (Week 2-6): Programming A—Repetition in shapes

## PSHE (Unit)- Belonging to a community

### What makes a community; shared responsibilities

- the meaning and benefits of living in a community
- to recognise that they belong to different communities as well as the school community
- about the different groups that make up and contribute to a community
- about the individuals and groups that help the local community, including through volunteering and work
- how to show compassion towards others in need and the shared responsibilities of caring for them

### P.E (Unit)

Games / Dance

## MFL (French):

That's Tasty

Units—2, 3, 5 and 6