

Dear Parents,

Over the next term we will be following a unit of work on a theme that focuses on 'Rainforests'. During this unit we will be focusing on Science Geography, Community and Global.

Children will be reading, researching, writing, illustrating, working on their own and working in groups. We will be checking to see how well your child has learned through particular activities and asking children to explain their work, perhaps to you. In addition the children will complete a quiz on the key vocabulary and powerful knowledge . You can see in advance what we will be asking the children (quiz) and what they need to know ( knowledge organiser) ,they are attached in this booklet.

We already know the interest you take in your child's work. If you can, please discuss with your child the work they have done as the term progresses and let them teach you. If your child has some work to research, please help them, but without actually doing the work. If you have the chance to further their interest in the ideas of this theme please take it, but your enthusiasm and interest is most important. By the end of the unit, we hope your child has achieved all of the learning targets. We hope they have had an enjoyable time in the classroom. And we hope you have enjoyed seeing your child work with enthusiasm. If you have any comments or questions about your child's learning, please get in touch.

In Science, we'll be finding out:

- About different rainforest animals and plants
- Where different animals and plants live in the rainforest
- About rocks and soils found on the forest floor
- About colour in the rainforest and how it is used by animals and plants
- Why plants have leaves and why they can be different
- About the best conditions to grow a plant
- About rainforest fruits and seeds
- How to grow our own rainforest plant from a seed

In Art we'll be finding out:

- About rainforest body art and painting our faces in a similar style
- How we can use art to create a rainforest scene

In Physical Education, we'll be finding out:

- How to represent a rainforest scene using dance and mime



In Global, we'll be finding out:

- How different countries and organisations are helping to save our rainforests

In Technology, we'll be finding out:

- How to program and share our own rainforest-themed computer game
- How to plan and make our own tropical fruit drink

In Geography, we'll be finding out:

- About where rainforests are in the world
- Which rainforest products we use in our everyday lives
- About the lives of rainforest people and how they compare with our own
- How and why the rainforest is being destroyed
- Discovering the ways that people are trying to save the rainforest

# Powerful Knowledge

Tropical rainforests grow all around our planet in the humid areas that straddle the equator. They cover vast areas of South America, Africa, South East Asia and Australia. In the rainforest it is almost always hot and wet.

More than half of the world's estimated 10 million species of plants, animals and insects live in tropical rainforests.

Sadly, rainforests today are under great threat. Thousands of acres are being damaged or destroyed daily due to human activity. It is believed that, in 40 years time, there will no longer be any rainforest left on the planet.

The rainforest habitat is divided into layers:

- The forest floor is rich in nutrients, providing a home to seedlings, herbs, fungi and forest debris. It is teeming with insects, snakes and small mammals.
- The understory is the dark, dense and very humid middle layer. Ferns, vines and creepers grow here, and young saplings battle their way towards the light.
- The thick canopy is where most of the activity takes place. The light, moisture and rich food supplies make this layer home to the majority of the rainforest's colourful and mysterious wildlife. This layer is also where the dazzling forest flowers bloom.
- The emergent layer is made up of the tops of the tallest trees, some stretching as high as 120 feet.

Millions of people all over the world use products from the rainforests on a daily basis.

The rainforest provides a home for different groups of people.

Lifecycles in the rainforest are totally interdependent and even small changes can lead to extinction of species.



Taddington and Priestcliffe  
Knowledge organiser

Junior Spring half term 2

## Overarching theme

**Magic, mysteries and discoveries**

Inquiry into rights and responsibilities in the struggle to share finite resources with other people and other living things; human-made systems and communities; and the environment, past present and

## Explanation of the theme

Rainforests once covered 14% of our world's surface. Now they cover less than 5%. Every second, an area of the rainforest the size of a football field is being destroyed. Some scientists believe that, if we lose our rainforests, we might put our whole planet at risk. What will we do to help save the rainforest?

## Key Image 1



# Key Vocabulary

indigenous

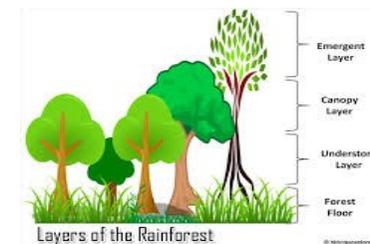
deforestation

canopy

understory

emergent layer

tropical

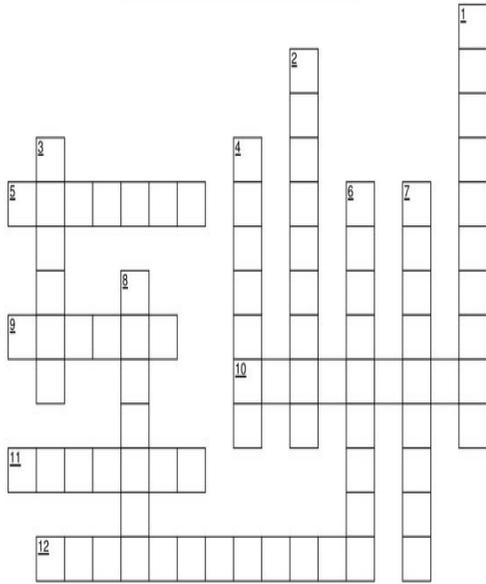


## Key Image 2

## Curriculum drivers

- Enterprise, ✓
- Possibilities ✓
- Inquiry, ✓
- Community ✓

## The Rainforest



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### ACROSS

- 5 The area or environment where an animal lives.
- 9 The top level of the rainforest.
- 10 An animal that only eats meat and other animals.
- 11 A cold blooded vertebrate that has a backbone.
- 12 Saving, protecting, and using resources wisely.

### DOWN

- 1 An animal that is close to being extinct.
- 2 An animal that only eats plants.
- 3 A warm blooded vertebrate that has hair or fur and produces milk.
- 4 When an animal is no longer alive on Earth.
- 6 A cold blooded vertebrate that lives on land and in water.
- 7 To have offspring or babies.
- 8 A group of animals that have the same characteristics.

**WORD BANK:** Amphibian, canopy, carnivore, conservation, endangered, extinct, habitat, herbivore, mammal, reproduce, reptile, species.



Taddington and  
Priestcliffe



What are the main threats to the rainforest?

# Rainforest Layers

Rainforests are made up of different \_\_\_\_\_. At \_\_\_\_\_ level, short, leafy plants grow. Fungi grows here, turning dead material into useful \_\_\_\_\_. There is not much \_\_\_\_\_ here, as the canopy blocks the sunlight from above.

Above the ground layer, rise skinny \_\_\_\_\_ and twisting \_\_\_\_\_. Epiphytes grow in this layer, also known as the \_\_\_\_\_ layer.

Higher still are fully grown trees that may be 30 or more \_\_\_\_\_ tall. Their leaves form a vast green \_\_\_\_\_, which hangs like a roof over the plants below. The canopy is alive with lots of \_\_\_\_\_, as this is where they find food.

Some trees reach even higher, into the \_\_\_\_\_ layer.

emergent

metres

light

saplings

canopy

understory

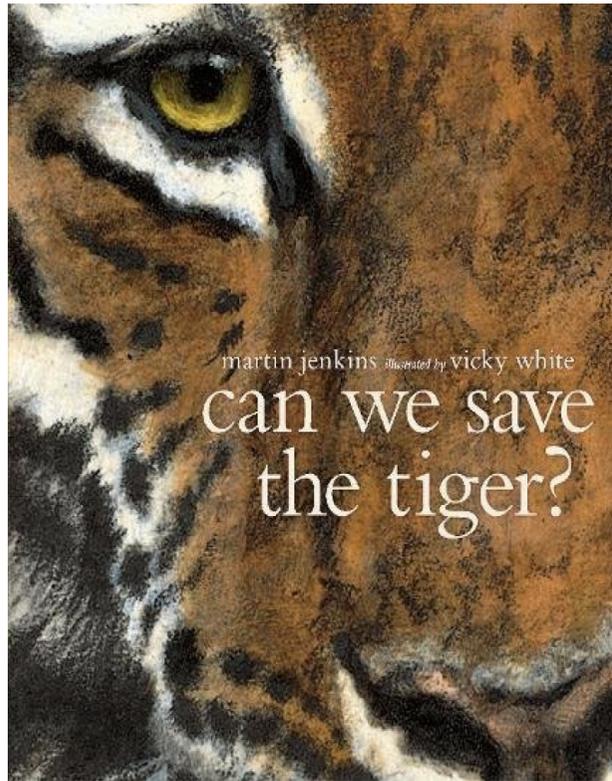
vines

ground

layers

nutrients

animals



## Overarching theme

### How the world works

**Inquiry into the natural world and its laws, the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and techno-**

## Overview and outcomes

This is a three-week teaching sequence based upon Can We Save the Tiger by Martin Jenkins and Vicky White, but also using the poem The Tyger by William Blake from Songs of Innocence and Experience. The sequence begins by asking children to explore an argument from another group's perspective, before going on to read the text. During the sequence, children create posters, persuasive speeches, poems (as well as having the opportunity to learn a poem by heart), explanation texts and discussion texts. The final outcome gives children the opportunity to publish their discussion text as a newspaper article.

## Key sentence types

### Name – adjective pair – sentences

**Rule:** This works on a show and tell basis where the name and details form the main clause (tell). The added information within the dashes **shows** what the character was like.

The two must be linked.

Example: Little Tim – **happy and generous** – was always fun to be around.

Ben Roberts – **weak and nervy** – was actually a secret superhero.

## National Curriculum Coverage

### Vocabulary, Grammar & Punctuation

- Verb prefixes [for example, *dis-*, *de-*, *mis-*, *over-* and *re-*]
- Relative clauses beginning with *who*, *which*, *where*, *when*, *whose*, *that*, or an omitted relative pronoun
- Indicating degrees of possibility using adverbs [for example, *perhaps*, *surely*] or modal verbs [for example, *might*, *should*, *will*, *must*]
- Devices to build cohesion within a paragraph [for example, *then*, *after that*, *this*, *firstly*]
- Linking ideas across paragraphs using adverbials of time [for example, *later*], place [for example, *nearby*] and number [for example, *secondly*] or tense choices [for example, *he had seen her before*]
- Brackets, dashes or commas to indicate parenthesis
- Use of commas to clarify meaning or avoid ambiguity
- The difference between vocabulary typical of informal speech and vocabulary appropriate for formal speech and writing [for example, *find out* – *discover*; *ask for* – *request*; *go in* – *enter*]
- How words are related by meaning as synonyms
- The difference between structures typical of informal speech and structures appropriate for formal speech and writing [for example, the use of question tags: *He's your friend, isn't he?*, or the use of subjunctive forms such as *If I were* or *Were they* to come in some very formal writing and speech]
- Linking ideas across paragraphs using a wider range of cohesive devices: repetition of a word or phrase, grammatical connections [for example, the use of adverbials such as *on the other hand*, *in contrast*, or *as a consequence*], and ellipsis
- Layout devices [for example, headings, sub-headings, columns, bullets, or tables, to structure text]
- How hyphens can be used to avoid ambiguity [for example, *man eating shark* versus *man-eating shark*, or *recover* versus *re-cover*]

### Writing (Composition)

#### Plan their writing by:

- Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- Noting and developing initial ideas, drawing on reading and research where necessary

#### Draft and write by:

- Selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
- Précising longer passages
- Using a wide range of devices to build cohesion within and across paragraphs
- Using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]

#### Evaluate and edit by:

- Assessing the effectiveness of their own and others' writing
- Proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
- Proof-read for spelling and punctuation errors
- Performing their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

### Reading Comprehension

Maintain positive attitudes to reading and understanding of what they read by:

- Continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- Reading books that are structured in different ways and reading for a range of purposes
- Learning a wider range of poetry by ear
- Preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience

Understand what they read by:

- Asking questions to improve their understanding
- Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
- Retrieving, record and present information from non-fiction
- Participating in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
- Explaining and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
- Providing reasoned justifications for their views

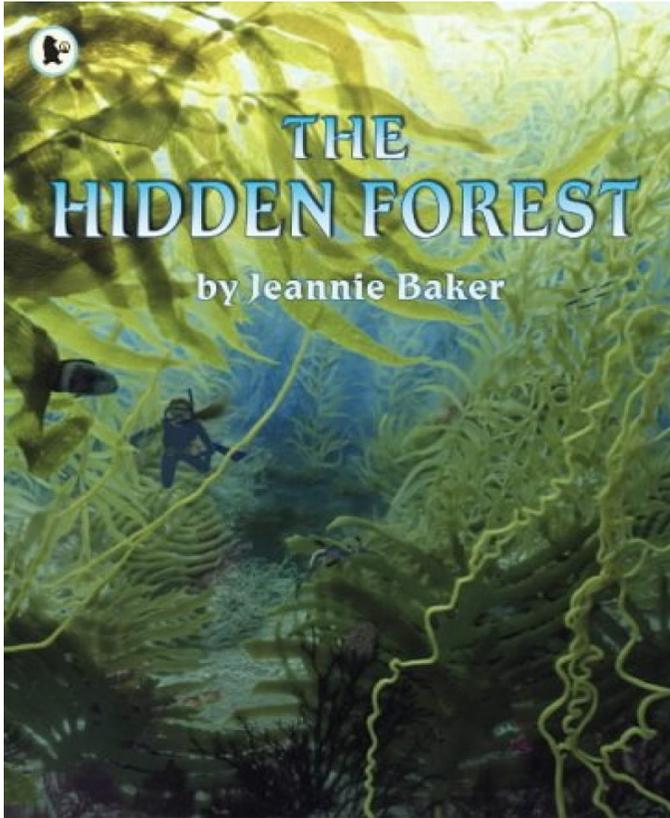
### Word Reading

- Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet



Taddington and Priestcliffe  
Knowledge organiser

*Literacy Spring term 2 Year 5  
and Year 6*



### Overarching theme

How the world works

**Inquiry into the natural world and its laws, the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and techno-**

### Overview and outcomes

This three-week planning sequence is based on 'The Hidden Forest' by Jeannie Baker. The children start by creating a collage based on the author's art work that she created to illustrate the text writing an artist's 'blurb' for the piece. They then move on to explore the main character (Ben's) feelings and how he changes over time. After receiving a letter from the text's main character asking for help, the children conduct some research into the topic of Giant Sea Kelp and use the information to create a non-chronological piece in letter form in response to Ben's letter. Finally, a second letter arrives, this time from a local fisherman who cannot see why he must reduce fishing in areas where the Giant Kelp Forests are struggling to survive. Using the technique of Hot Seating an opposing view emerges and the children participate in a debate. This then leads to the writing of a balanced discussion. Throughout the unit, a variety of drama techniques such as Thought-Tapping and role-play are used. Modelled Writing gives the children the opportunity to develop skills in a supported environment. Words from the year 5/6 statutory word lists and direct teaching of grammar from the statutory appendix for year 5 are embedded in the sequence.

### Key sentence types

#### **De:De Sentence**

**Rule:** Two independent clauses (they make sense on their own) are separated by a colon (:)

The first clause is descriptive

The second adds further detail

Example: The vampire is a dreadful creature: It kills by sucking all the blood from its victims.

Snails are slow: They take hours to cross the shortest of distances.

### National Curriculum Coverage

#### **Reading Comprehension**

Pupils should be taught to:

- Maintain positive attitudes to reading and understanding of what they read by:
  - Continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- Reading books that are structured in different ways and reading for a range of purposes understand what they read by:
  - Drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
  - Identifying how language, structure and presentation contribute to meaning
- Retrieve, record and present information from non-fiction
- Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously

#### **Word Reading**

Pupils should be taught to:

apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in [English Appendix 1](#), both to read aloud and to understand the meaning of new words that they meet.

#### **Writing Transcription (Spelling and Handwriting)**

3 words to be explicitly taught, used and applied from the year 5/6 word list according, desperate, persuade (also see 'vocabulary')

#### **Writing (Composition)**

Pupils should be taught to:

Plan their writing by:

- Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own noting and developing initial ideas, drawing on reading and research where necessary

Draft and write by:

- Using a wide range of devices to build cohesion within and across paragraphs
- Using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]

Evaluate and edit by:

- Assessing the effectiveness of their own and others' writing
- Proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning

#### **Vocabulary, Grammar & Punctuation**

Pupils should be taught to:

Develop their understanding of the concepts set out in English Appendix 2 by:

- Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
- Using modal verbs or adverbs to indicate degrees of possibility
- Using brackets, dashes or commas to indicate parenthesis



**Taddington and Priestcliffe  
Knowledge organiser**

*Literacy Spring term 2 Year 5  
and Year 6*

# Unit 6

## Measure – area and perimeter



In this unit we will ...

- ✦ Measure shapes to find their perimeter
- ✦ Calculate the perimeter of squares, rectangles and other rectilinear shapes
- ✦ Use a formula to find the area of squares and rectangles
- ✦ Estimate the area of different shapes

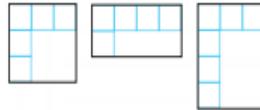
How many rows? How many in each row? How many altogether?



Here are some maths words we will be using. Which words are new?

perimeter distance area space  
length width  
centimetres square centimetres (cm<sup>2</sup>)  
metres square metres (m<sup>2</sup>) scale  
compare estimate formula  
2D shape brackets

Which shape has the largest area?  
How do you know?



## Taddington and Priestcliffe Knowledge organiser

### Year 5 Maths Spring term 2

# Unit 7

## Multiplication and division 2



In this unit we will ...

- ✦ Multiply a number up to 4 digits by a 1- or 2-digit number
- ✦ Divide a number up to 4 digits by a 1-digit number
- ✦ Interpret remainders
- ✦ Solve problems involving multiplication, division and remainders

How can you use the grid method to work out  $17 \times 4$ ?

$$\begin{array}{r}
 17 \\
 \times 4 \\
 \hline
 68
 \end{array}$$

$10 \times 4 = 40$      $7 \times 4 = 28$

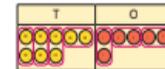


We will need some maths words.  
Do you know what they all mean?

multiply divide add subtract  
place value partition  
equal factor multiple  
remainder sum total

We also need to be able to use the short division method.

$$\begin{array}{r}
 43 \\
 2 \overline{) 86} \\
 \underline{8} \phantom{0} \\
 06 \\
 \underline{6} \\
 0
 \end{array}$$



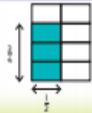
# Unit 5 Fractions 2

In this unit we will ...

- ✦ Multiply any fraction by a whole number or another fraction
- ✦ Divide a fraction by a whole number
- ✦ Solve problems involving all four operations with fractions
- ✦ Solve problems involving a fraction of an amount



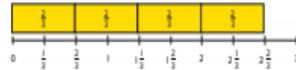
You will be able to multiply a fraction by a fraction by showing each fraction on the side of a grid. What is  $\frac{1}{2} \times \frac{1}{2}$ ?



We will need some maths words. How many of these can you remember?

numerator    denominator    whole number  
mixed number    proper fraction  
improper fraction    convert    simplify

We can use a fraction strip above a number line to help us multiply a fraction by a whole number and convert between improper fractions and mixed numbers. What is  $\frac{2}{3} \times 4$  as a mixed number?



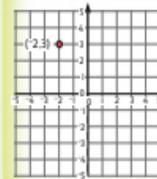
## Taddington and Priestcliffe Knowledge organiser

### Year 6 Maths Spring term 2

# Unit 6 Geometry – position and direction

In this unit we will ...

- ✦ Look at how we can use coordinates to describe the position of a point on a grid
- ✦ Look at how coordinates can have positive or negative values
- ✦ Explore how we can use our knowledge of properties of shape to help us solve problems on a coordinate grid
- ✦ Explore how we can move and change shapes on a coordinate grid, through translations and reflections



We are going to use grids like this in this unit. How is it different to what you have met before?



We will need some maths words. Which ones have you seen before?

quadrant    four quadrants    translate  
translation    x-axis    y-axis    axis  
axes    horizontal    vertical  
vertex    reflect    reflection

We will need this too! Can you work out how we could describe the position of the point on the grid?

