# **Long Term Scheme of Learning**

# **Upper Key Stage 2** Year 5

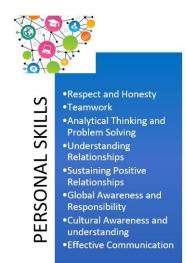
2024 - 2025



At Barley Fields Primary School, our **Curriculum Promise** is a guarantee that we will provide every child with access to an aspirational, high-quality and sequenced curriculum where the needs of your child across a range of developmental areas – academic, social and emotional – will always be at the centre of our provision and planning. We will provide stimulating wider curriculum where all children will benefit from a diverse range of educational experiences and residential visits during their journey through our school.







Our curriculum is built on three pillars of intent and has the National Curriculum objectives at its foundation.

We have successfully designed our curriculum to be ambitious and to meet the needs of all children, developing their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. As our children make progress; they know more, remember more and are able to do more.

All children study the full curriculum. We have carefully considered and analysed our curriculum with regard to equality and the possible implications for pupils with protected characteristics including Special Educational Needs. We do not narrow our

curriculum offer to any child but may amend the curriculum to offer bespoke provision if necessary.

Our curriculum promotes high standards and excellence in all areas and is based on practical and first-hand experiential learning. We embed the use of technology across the curriculum and have excellent resources in this area. In addition to the academic and creative subject teaching, we will promote learning through growth mindset and the enhance the development of personal skills in a fun, caring and mutually supportive environment. Barley Fields Primary is a Rights Respecting School and our ethos actively promotes British Values and Global Learning.

# Composition Writing English

# Autumn 1 In A Galaxy Far **Far Away**

Description/narrative

#### The Solar System Non-

Chronological Report





A long tim∈ ago

in a galaxy far.

far awau

#### Autumn 2

Galileo **Explanation text** Letter Biography

# **Ancient Egypt**

Advert Instructions



#### **A Christmas Carol**

Poetry Descriptions **Biographies** 



#### Spring 1

# The **Highwayman**

Description Dialogue Narrative Diaries



# **Groovy Greeks**

Script Myth (including dialogue)



# Spring 2

The Storm Description Narrative



#### **Extreme Earth** Non-

chronological report





#### Summer 1

### **Discussion and Debate**



Speeches for and against

BLOGGING !

Discussion text

# Blog

Blog post (recount)

# Summer 2

#### Romeo and Juliet

News report **Trip Advisor Narrative** (dialogue) **Biography** 



# **Podcasts**

Question and answer text Podcast script





# Mathematics

# Number: Place Value Roman numerals to 1000 Numbers to 10,000 Numbers to 100,000 Numbers to 1,000,000 Read and write numbers Powers of 10 10/100/1,000/10,000/100,000 more or less Partition numbers Number lines Compare and order Rounding

# Number: Addition and Subtraction

Mental strategies
Add whole numbers
Subtract whole numbers
Round to check answers
Inverse operations
Multi-step problems
Compare calculations
Find missing numbers

## **Statistics**

Draw line graphs
Read and interpret data in line
graphs
Two way tables
Read and interpret timetables

#### Number Multiplication and Division

Multiples
Common multiples
Factors
Common factors
Prime Numbers
Square numbers
Cube numbers
Multiplying by 10, 100 and
1000
Dividing by 10, 100 and
1000
Multiples of 10, 100 and
1000

# Measures Area and Perimeter

Perimeter of rectangles
Perimeter of rectilinear
shapes
Perimeter of polygons
Area of rectangles
Area of compound shapes
Estimate area

# Measurement Negative numbers

Understanding negative numbers
Count through zero in 1s
Count through zero in multiples
Compare and order negative numbers
Find the difference

# **Geometry Properties of Shape**

Understand and use degrees
Classify angles
Estimate angles
Measure up to 180
Draw lines and angles
accurately
Calculate angles around a point
Calculate angles on a straight
line
Lengths and angles in shapes
Regular and irregular polygons

# Number Multiplication and Division

3D shapes

Multiply a 4 digit by 1 digit
Multiply a 2 digit by 2 digit
Multiply a 3 digit by 2 digit
Multiply 4 digits by 2 digits
Solve problems with
multiplication
Short division
Divide a 4 digit number by a
1 digit number
Divide with remainders
Efficient division
Solve problems with
multiplication and division

# Geometry Position and Direction

Read and plot co-ordinates
Problem solving with coordinates
Translation
Translation with coordinates
Lines of symmetry
Reflection

#### Number Fractions Find fractions equivalent to

a unit fraction Find fractions equivalent to a non-unit fraction Recognise equivalent fractions Convert improper to mixed Convert mixed to improper Compare fractions less than Order fractions less than 1 Compare and order fractions greater than 1 Add fractions within 1 Add fractions with totals greater than 1 Add a mixed number Add two mixed numbers **Subtract fractions** Subtract from a mixed number Subtract from a mixed number (breaking the whole) Subtract 2 mixed numbers

#### Number Fractions B

Multiply a unit fraction by an integer
Multiply a nin unit fraction by an integer
Multiply a mixed number by an integer
Calculate a fraction of a quantity
Fraction of an amount
Find the whole
Use fractions as operators

#### <u>Number</u>

# **Decimals and Percentages**

Decimals up to 2 places Equivalent fractions and decimals (tenths) Equivalent fractions and decimals (hundredths) **Equivalent fractions and** decimals Thousandths as fractions Thousandths ad decimals Thousandths on a place value chart Order and compare decimals Round to the nearest whole number Round to 1 dp Understand percentages Percentages as fractions Percentages as decimals Equivalent fractions.

decimals and percentages

#### **Number: Decimals**

Use known facts to add and subtract decimals Complements to 1 Add and subtract decimals across 1 Add decimnals with the same number of decimal places Subtract decimals with the same number of decimal places Add decimals with different numbers of decimal places Subtract decimals with different numbers of decimal places Efficient strategies for adding and subtracting decimals Decimal sequences Multiply by 10 100 1000 Divide by 10 100 1000 Missing values

#### Measurement

# **Volume** and Capacity

Cubic centimetres Compare volume Estimate volume Estimate capacity

# Measurement Converting Units

Kilograms and kilometres
Millimetres and millilitres
Convert units of length
Convert between metric and
imperial
Convert units of time
Calculate with timetables

	Earth and Space	Materials Properties and Changes of Materials	Living Things and their Habitats Life Cycles	Animals, including Humans Changes and Reproduction	Forces in Action  Types of Force	Scientists and Inventors  Scientists and Inventors
Science	<ol> <li>What do we know about the sun, earth and moon?</li> <li>Why do we have day and night?</li> <li>What are the seasons?</li> <li>What do we know about the moon?</li> <li>What do we know about the solar system?</li> <li>What do we know about the planets in the solar system?</li> </ol>	<ol> <li>What happens when we mix materials with water?</li> <li>Can we reverse the process of dissolving materials in water?</li> <li>Are all material changes reversible?</li> <li>Can heating and cooling change materials?</li> <li>What happens when something burns?</li> <li>How can we group different materials?</li> <li>Investigating Materials</li> </ol>	<ol> <li>How do flowering plants reproduce?</li> <li>What is asexual reproduction?</li> <li>How do animals reproduce?</li> <li>Are animal life cycles all the same?</li> <li>Are animal lifecycles adapted to where they live?</li> </ol>	<ol> <li>What are the stages in the life cycle of a human?</li> <li>What is the gestation period?</li> <li>How do babies develop in their first year?</li> <li>What happens as we get older?</li> </ol> Include here lessons from the RSE curriculum	<ol> <li>What is weight?</li> <li>What is Friction</li> <li>What is Air résistance?</li> <li>What is water resistance?</li> <li>How to levers and pulleys work?</li> <li>What are gears and how do they work?</li> </ol>	<ol> <li>How can we use science to solve crimes?</li> <li>Who is Sir David Attenborough and what is he known for?</li> <li>What do we know about Margaret Hamilton and what is she known for?</li> </ol>

# Computing

# **Computer Science** - Computing Systems and **Networks** The Internet



- 1. How do networks physically link together?- In class
- 2. What is the internet made of?
- 3. What can be shared on the World Wide Web?computers/iPad
- 4. What is a Website? -Computers/iPad
- 5. Who owns the World Wide Web? Computers/iPad
- 6. Can I believe what I read?

# **Computer Science Craeting Media 1 Audio Production**



- 1. How can sound be recorded?- In class
- 2. How can we edit an audio recording? -Computer/iPad
- 3. What is a Podcast and how can I plan to record one?-Computer/iPad
- 4. Can I record and edit sounds to create a Podcast? -Computers/iPad
- 5. Can I enhance and develop my Podcast with sound effects and music? Computers/iPad
- 6. Can I evaluate my Podcast?

# **Computer Science Creating Media 2 Photo Editing**



- How can I change a digital image?- iPad
- What happens when we change the colours and colour effects of images?iPad
- technique help to improve images? iPad 4.
- Can I use a range of tools to edit and combine images? iPad
- Can I combine images for a purpose? iPad
- 6. Can I evaluate my work and make editing changes? I Pads

# **Information Technology Data and Information Data and Information Data Logging**



- 1. How can data gathered over time be used to answer questions?
- 2. How can I collect data over time with a digital device?
- How does the cloning 3. What is a data logger?
  - How can I analyse data in a data file?
  - 5. Can I think of questions that can be answered from my logged data?
  - 6. Can I use my data collected to answer questions?

# **Computer Science Programming A Repetition in Shape**



# **Computer Science Programming B Repetition in Games**



- 1. What is Logo?
- 2. Can I write ordered instructions (code) to created my initials in logo?
- 3. How do Luse the 'repeat' command in 3. Can I develop a Logo?
- 4. How do loops in code create effects?
- 5. What is decomposition as how can it be used in code?
- 6. Can I create a program with countcontrolled loops?

- 1. How can I create loops of code in the Scratch program?-
- 2. What types of loop can be created in programming?
  - design using loops to create a short animation?
- 4. Can I modify code for a game design to change how things happen?
- 5. Can I design a game that includes the use of repetitive code in the algorithm?
- 6. To create a game using my coding skills?

# What can we find out about life in Ancient Egypt?



# Who were the Ancient Greeks?



## Who were the Maya?



# '

History

- 1. What is the Chronology of Ancient Egypt.
- 2. What was lifelike in early Egypt?
- **3.** Did the Ancient Egyptians write anything down?
- 4. Who were the Egyptian gods?
- **5.** What did the Ancient Egyptians believe about the afterlife?
- **6.** How were the pyramids built?

- 1. What can we find out about daily life in Ancient Greece?
- 2. How can we possibly know so much about the Ancient Greeks who lived over 2,500 years ago?
- 3. Why was Athens so strong at this time?
- 4. History mystery Why did tiny Athens defeat mighty Persia at the battle of Marathon?
- 5. What was so special about life in 5th Century BC Athens that makes us study it?
- 6. In what ways have the Ancient Greeks influenced our lives today?

- 1. Who were the ancient Maya People?
- 2. How do we know the Maya existed?
- 3. How did the Mayan civilisation develop?
- 4. What did the Maya believe?
- 5. Why did the Maya believe in Human Sacrifice?
- 6. How did the Maya live?
- 7. How did the Maya write?
- 8. Why did Mayan civilisation end?

# Human and Physical Geography Investigating Rivers A Local Study



# Physical Geography Study Extreme Earth - Earthquakes



# Location and Place - Contrasting Locality Brazil

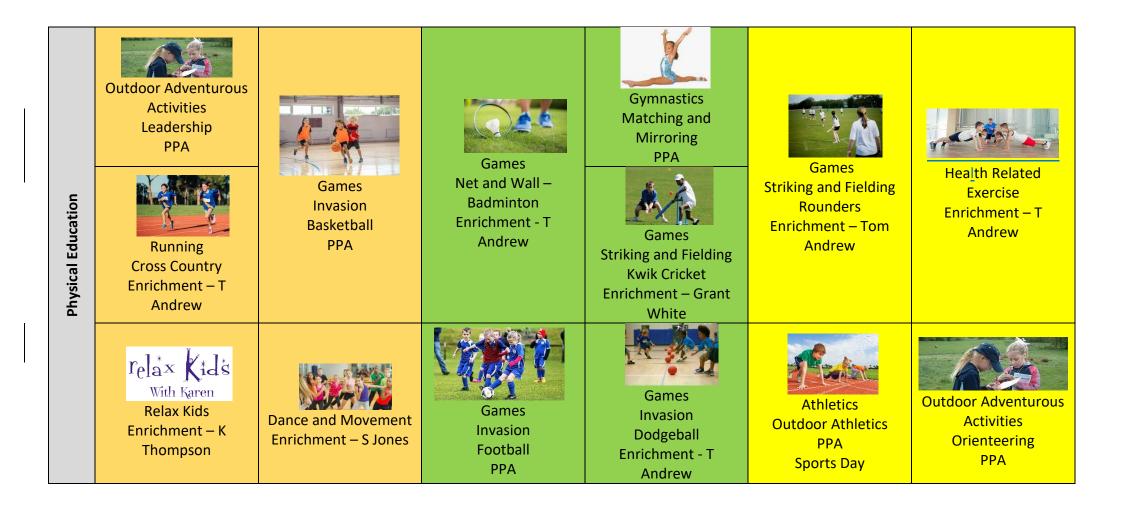


# Geogarphy

- 1. What is the Water Cycle and why is it important?
- 2. Where are the UK's major rivers?
- 3. What are the main features of a river system?
- 4. What are the 3 stages of a river?
- 5. How do we use water?
- 6. What can I discover about the river Tees?

- How does the earth's crust behave?
- 2. What causes an earthquake?
- 3. What are the five deadly features of an earthquake?
- 4. What information do we use to work out which earthquakes are the biggest?
- 5. Where are the world's biggest earthquakes located?
- 6. What have I learned about earthquakes?

- 1. What are the countries and capitals of South America?
- 2. How can I locate the cities of Brazil?
- 3. What are the human and physical features of Brazil?
- 4. What can I find out about Brazil's ecosystems?
- 5. What is Brazil's weather and climate like?
- 6. How does Sao Paulo differ to Stockton?



#### **Olympic Games** What Is The Date? What is the weather? **Habitats** Clothes Do You Have A Pet? (Les Jeux Olympique) (Les Vetements) (Quelle Est La Date?) (Quel Temps Fait-II?) (Les Habitats) (As-Tu Un Animal?) Intermediate Language Intermediate Language Intermediate Language Intermediate Language Intermediate Language Intermediate Language Unit Unit Unit Unit Unit Unit leux Olympiques un animal? 1. Can you name 8 1. What are the months Quel temps fait-il? 1. What do plants and What do we know 1. What items of clothing of the year in French? What weather is it? animals need in order common animals with about the history of can name? Part 1 2. What are the months to survive? the ancient Olympic 2. What items of clothing their matching article? Part 1 2. Which pets do you of the year in French 2. Quel temps fait-il? 2. Can you identify Games? can name? Part 2 MF different habitats 2. How did the modern 3. Can I add the verb 'je have? (2)? What weather is it? 3. Can you tell me the 3. What is the date Part 2 plants and animals can Olympic Games begin? porte' to the clothing 3. Use and apply 3. Can I name some items? name of your pet(s)? today? be found in? 4. Which pets don't you 4. When is your knowledge of weather 3. Can you identify which modern Olympic 4. Can I use adjectival have? birthday? phrases plants are found in sports? agreement to clothing 5. Can I link all my new 5. Can you complete a 4. La Meteo (The particular habitats? 4. When is the verb items in terms of 'faire' (to do) used? colours of clothes? vocabulary together? reading and writing weather forecast) **4.** Can you identify which 6. What have you learnt challenge to What is the weather animals live within a 5. What are the Olympic 5. Can I use possessive in the unit, As-Tu Un consolidate your like in different parts events? adjectives accurately given environment of France? 6. What have you learnt Animal? learning from this unit and how they are (mon, ma, mes - my)? 5. La Meteo – Can I be a so far? adapted to thrive and in the unit. Les Jeux 6. Can I complete an end 6. What have you learnt French weather survive? Olympiques? of unit assessment on in the unit? presenter? **5.** What have you learnt Les vêtements? 6. What have you learnt from the unit Les in the unit, Quel temps Habitats? fait-il?

Design		Sculpture Sculpture	Painting Painting	Westward Westward	
d De	<ol> <li>What do you already know about Ancient Egyptian Art?</li> <li>Did you know that art is a form of communication?</li> <li>Can you create a sculpture with a purpose?</li> <li>What are tertiary colours?</li> </ol>		<ol> <li>What is Impressionism and how did it begin?</li> <li>Who is Claude Monet?</li> </ol>	<ol> <li>Who is Frida Kahlo?</li> <li>What is a sugar skull?</li> </ol>	
tand			<ul><li>3. How did Monet paint his landscapes?</li><li>4. How did Monet and the Impressionists use</li></ul>	<ul><li>3. Who is Vivienne Westward?</li><li>4. Print – Stencil Prints</li></ul>	
Art			complementary colours?	4. Find – Stellen Fints	
	5.	. Can you decorate your Canopic Jar?	5. What do we know about local landscapes/landmarks?		
			6. Planning a painting		
			7. Create a painting in the style of Monet		
		Mechanisms Moving Toys See module planner- Cams	Food and Nutrition - Bread See module planner- Celebrating seasonality and culture	Electrical systems Programming Pioneers See module planner- More complex switches	
	1.	. What are we learning in DT? . What is a cam mechanism?	What are we learning in DT?	1. What are we learning in DT?	
<b>-</b>	1. 2. 3.	. What is a cam mechanism? . How can I create a cam mechanism?	<ol> <li>What are we learning in DT?</li> <li>Can you successfully investigate a range of bread products in order to establish your</li> </ol>	<ol> <li>What are we learning in DT?</li> <li>What do we know about fairgrounds?</li> <li>How do I use a motor to make something</li> </ol>	
DT	3. 4.	<ul><li>What is a cam mechanism?</li><li>How can I create a cam mechanism?</li><li>How can I strengthen a structure?</li></ul>	<ol> <li>What are we learning in DT?</li> <li>Can you successfully investigate a range of bread products in order to establish your favourite?</li> </ol>	<ol> <li>What are we learning in DT?</li> <li>What do we know about fairgrounds?</li> <li>How do I use a motor to make something rotate?</li> </ol>	
DT	3.	<ul><li>What is a cam mechanism?</li><li>How can I create a cam mechanism?</li><li>How can I strengthen a structure?</li><li>Can I design a moving toy for a specific purpose</li></ul>	<ol> <li>What are we learning in DT?</li> <li>Can you successfully investigate a range of bread products in order to establish your favourite?</li> <li>How is bread included as part of our balanced</li> </ol>	<ol> <li>What are we learning in DT?</li> <li>What do we know about fairgrounds?</li> <li>How do I use a motor to make something rotate?</li> <li>Can I create a prototype structure?</li> </ol>	
TO	3. 4. 5.	<ul><li>What is a cam mechanism?</li><li>How can I create a cam mechanism?</li><li>How can I strengthen a structure?</li></ul>	<ol> <li>What are we learning in DT?</li> <li>Can you successfully investigate a range of bread products in order to establish your favourite?</li> </ol>	<ol> <li>What are we learning in DT?</li> <li>What do we know about fairgrounds?</li> <li>How do I use a motor to make something rotate?</li> </ol>	

5. Can you create a new bread recipe for a specific

6. Can you make your final bread product by

7. Can you evaluate your finished product?

purpose and market?

following a recipe?

Monet and Impressionism

Frida Kahlo and Vivienne

7. Can I evaluate my finished product?

Fgyntian Art

		Places of Worship/	Festivals/Beliefs and	Beliefs and Practices:	Festivals/Beliefs and	Belonging/ Founders	Beliefs and Practices:
		Sacred Texts:	Practices:	What are religious rules	Practices:	and Leaders:	What is a puzzling
		What is the Gurdwara	Is Christmas too	for?	Who was responsible	Does everyone have a	question?
	<u>aı</u>	nd why is it important?	commercial?	New York Control of the Control of t	for Jesus' death?	<u>faith?</u>	
				COMPANY OF THE PARK OF THE PAR		Buddhist XX X X X X X X X X X X X X X X X X X	
	1.	What are the	1. What is Christmas?	1. What are rules and	1. What is meant by	1. Does everyone have	1. What is a puzzling
		features of the 6	2. What does	why are they	betrayal and	Faith?	question?
		major religions?	Christmas mean to	important?	loyalty?	2. What is a humanist?	2. What is a puzzling
A H	2.	What places of	different people?	2. Where do Christians	2. Who supported and	3. What do Humanists	question?
		worship are in our	3. How do Christian's	get their rules from?	who betrayed Jesus	believe?	3. How can we answer
		local area?	help others at	3. What rules does the	in the Easter story?	4. How do Humanists	puzzling questions?
	3.	What are the	Christmas?	Jewish community	3. Who was Mary	find happiness and	4. What do I think
		features of a	4. What do we mean	follow?	Magdalene?	meaning?	about puzzling
		Gurdwara?	by the commercial	4. What rules do	4. Who was Judas	5. How do Humanists	questions?
	4.	School Visit to Local	part of Christmas?	Muslims follow with	Iscariot?	celebrate?	5. What is a Religion?
	_	Gurdwara	5. Compare and	their diet?	5. Who was	6. What is a moral	
	5.		contrast the	5. Why do Muslims	responsible for	dilemma?	
		Granth Sahib?	commercial and	fast?	Jesus' death?		
	6.	, ,	moral features of	6. What is temptation?	6. Why is Jesus' death		
		Sikhs take as part of	Christmas		important to		
		their faith?			Christians?		

		Health and Wellbeing –	Relationships – Be Yourself	Relationships - Team	Living in the Wider	Living in the Wider
	Health and Wellbeing It's My Body	Aiming High	Be Your left		World – Britain Rights	World Money Matters
PSHE	<ol> <li>Why is looking after our bodies so important and what is autonomy and what is consent?</li> <li>How can we get a good night's sleep and what are the effects of not getting enough sleep?</li> <li>What are drugs, alcohol and tobacco and what are the effects of using them? What are the risks of taking harmful substances?</li> <li>What choices do we have about keeping our bodies and minds healthy and what influences our choices about our bodies and our physical and mental health?</li> </ol>	<ol> <li>What have we achieved and learnt since we started school and what skills and attributes have we used to make that happen?</li> <li>How do successful learners overcome challenges and do positive learning strategies help us?</li> <li>Can some jobs only be done by certain kinds of people and are some jobs for men and some for women?</li> <li>What skills might we need in the world of work and what is enterprise and why is it important?</li> </ol>	<ol> <li>Is it OK to think and feel differently to other people? What does 'being an individual' mean and why is this a good thing?</li> <li>Why is it important to share our thoughts and feelings with those around us and h ow can we communicate our thoughts and feelings to others.</li> <li>What are some of the uncomfortable feelings that people can feel and what can we do to manage them?</li> <li>How can we know when we might have to make a different choice to those around us and how can we do the right thing even if others do not?</li> </ol>	<ol> <li>How can we make our views heard without falling out with others and how can we respond respectfully to other people's feelings and opinions?</li> <li>How can we recognise what is safe and not safe online and know what is an age appropriate use of technology?</li> <li>Can I recognise when it is healthy to be part of an online community and when it is not healthy</li> <li>Do I Know what makes a good relationship and can I recognise a bad relationship?</li> </ol>	<ol> <li>What kind of people live in our Nation and how can we show respect for people whose faith or ethnicity is different to our own?</li> <li>What is a community and who makes it what it is and how can we contribute to our community?</li> <li>How does the law help us and What could happen if laws are broken?</li> <li>What is 'local government' and what does it do and how does local government work?</li> <li>What is 'national government' and what does it do and how does national government work?</li> </ol>	<ol> <li>How do manufacturers and retailers try to influence the way we spend our money and how can we be 'critical consumers'?</li> <li>What choices do we have when spending money and what is the impact of our spending choices?</li> </ol>

	Talking about Puberty  The Reproduction System and Menstruation	Puberty – Help and Support
	<ol> <li>Understand what puberty is.</li> <li>Explore the emotional and physical changes</li> </ol>	To explore the impact of puberty on the body and the importance of physical hygiene
RSE	<ul> <li>2. Explore the emotional and physical changes occurring in puberty.</li> <li>3. Explain the main physical and emotional changes that happen during puberty</li> <li>4. Ask questions about puberty with confidence</li> </ul>	2. To explore ways to get support during puberty
	<ol> <li>To understand male and female puberty changes in more detail</li> <li>Understand how puberty affects the reproductive organs</li> <li>Describe what happens during menstruation and sperm production</li> </ol>	