#### Earth & Beyond

Y5 Autumn 1

## Science

#### Working Scientifically

Identifying scientific evidence that has been used to support or refute ideas or arguments

Recognise that scientific ideas change and develop over time

## Earth & Space

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Describe the movement of the Moon relative to the Earth

Describe the Sun, Earth and Moon as approximately spherical bodies

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky

Learn that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a dwarf planet in 2006)

Understand that a moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones)

## Computing

#### Word Processing

Know what a word processing tool is for

Add and edit images to a word document

Know how to use word wrap with images and text

Change the look of text within a document

Add features to a document to enhance its look and usability

Use tables to present information

Become familiar with the use of templates

Consider page layout including headings and columns

## Geography- The World Map

## Knowledge & Skills

Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Artic and Antarctic Circle, the Prime/ Greenwich Meridian and time zones (including day and night)

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied, including physical features such as oceans, deserts, mountainous regions and the tropics.

Identify key physical and human characteristics, countries, and major cities describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts

# DT

#### Shelters

Research existing products.

Develop a simple design specification.

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Generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.

Formulate a clear plan for the making process.

Select from and use appropriate tools to accurately measure.

Mark out, cut, shape and join construction materials to make frameworks.

Use finishing and decorative techniques suitable for the product they are designing and making.

Understand how to strengthen, stiffen and reinforce 3-D frameworks

## PSHE

Mindfulness

First Aid Training

Kiva -Unit 2 Lesson 1 : Respect is for Everyone

## RE

#### Christianity

What do Christian believers believe about how they should care for the world? How is Christianity a diverse and global faith?

Compare and contrast what motivates people of a religious faith and a non-religious belief to work together to impact UJ society and the wider world

Investigate by gathering, selecting, organising and refining questions and ideas about religious/non-religious

French

French Festivals

Family & Friends

## MUSIC

## Getting Loopy

• Understand how loops can be used to structure a piece of music.



## Science

## Working Scientifically

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Using test results to make predictions to set up further comparative and fair tests

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of f trust in results, in oral and written forms such as displays and other presentations

Identifying scientific evidence that has been used to support or refute ideas or arguments

Explore and talk about their ideas; asking their own questions about scientific phenomena; analysing functions, relationships and interactions systematically

Recognise that scientific ideas change and develop over time

#### Forces

Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Identify the effects of air resistance, water resistance and friction, the act between moving surfaces

Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect

Printing

Design and create printing blocks inspired by the natural and man-made environment and its contents e.g. patterns in flowers, curtains, wallpaper, space imagery.

Art

Explore repeating patterns using rotation, symmetry and tessellation of positive and negative print blocks.

Continue to explore pattern, line, colour, shape and texture in multi-layered block printing.

Create repeated patterns with precision.

Explore relief printing by cutting/etching/tearing into different surfaces including corrugated cardboard, mount board, erasers and foil.

Continue to explore pattern, line, colour, shape and texture through relief printing.

## Music

Christmas Concert

11 1 13

•Time

Describe various forms of worship that happen in the Hindu Temple, including Puja

Compare/contrast Hindu ways of welcoming a child with all religious/non-religious views previously studied

Compare and contrast Hindu ways of understanding family with religious/non-religious views about family

Describe how and suggest why Hindus celebrate Diwali and Holi

## Computing

## Databases

Hinduism

brate Diwali?

Learn how to search for information in a database

Contribute to a class database

Create a database around a chosen topic

## **Concept Maps**

Understand the need for visual representation when generating and discussing complex ideas

Understand use of a concept map and associated vocabulary

Create a concept map

Understand how a concept map can be used to retell stories and information

PSHE

KIVA Unit 2 Lesson 2: Peer & Group Pressure **Diverse Britain Lesson 1** 

French

Revise Christmas vocabulary from Y3/4

RF

How is Hindu marriage celebrated? How do Hindus welcome babies? Why is Rama im-

portant to Hindus? How & why do Hindus cele-

#### **Raiders or Traders?**

**Y5** Spring

## History

#### **Historical Interpretations**

Find and analyse a wide range of evidence about the past

Use a range of evidence to offer some clear reasons for different interpretations of events, linking this to factual understanding about the past

Consider different ways of checking the accuracy of interpretations of the past

Start to understand the difference between primary and secondary evidence and the impact of this on reliability

Show an awareness of the concept of propaganda

Know that people in the past represent events or ideas in a way that may be to persuade others

Begin to evaluate the usefulness of different sources

#### Anglo-Saxons & Vikings

Be able to test out a hypothesis to answer historical questions

Identify some social, cultural, religious and ethnic diversities of societies studied in Britain and wider world

Appreciate how historical artefacts have helped us understand more about British lives in the present and the past

Sequence historical periods, identifying changes within and across historical periods

Use dates and historical language to investigate work

Be able to draw a timeline with different time periods outlined, which show different information such as periods of history and historical figures

## Geography

#### Knowledge & Skills

Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom (York)

Settlements—Why they were formed, their key features and place names

Human settlement changes over time including Anglo-Saxon/ Viking/Tudor/Georgian/Modern

## DT

## Cams Toys

Generate ideas through brainstorming and identify a purpose for their product

Draw up a specification for their design

Develop a clear idea of what has to be done, planning how to use materials , equipment and processes, and suggesting alternative methods of making if the first attempts fail

Use results of investigations, information sources, including ICT, when developing design ideas

Use skills in using different tools and equipment safely and accurately

Cut and join with accuracy to ensure a good quality finish to the product

Understand how mechanical systems such as cams, pulleys or gears create movement

Evaluate it personally and seek evaluation from others

## PSHE

KIVA Unit 2 Lesson 3 Internet Safety: NSPCC Share aware

## Christianity

Christians and the Kingdom of God

Explain using key texts, the Christian idea of the 'Kingdom of God' and how Christians seek to live to advance the Kingdom on Earth

Identify ways that Christians believe God is with them: prayer; worship; peace in hard

## French

Clothing

•Revision of body / face & appearances

## Computing

## Coding

Begin to simplify code

Create a playable game

Understand what a simulation is

Program a simulation using 2Code

Use decomposition and abstraction

Understand how to use friction and functions in code, about different variable types and their uses, how to create a string and what concatenation is and how it works

## Music

#### Performance Poetry

Understand how the voice is a powerful tool for musical and poetic expression

Write and perform own raps

RE

#### **Raiders or Traders?**

Y5 Spring (cont'd)

## Science

#### Working Scientifically

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Using test results to make predictions to set up further comparative and fair tests

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

#### Properties and changes of materials

Compare and group together everyday materials based on their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets

Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution

Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic



#### Viking Stew

Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods of making if the first attempt fails

DT

Weigh and measure accurately (time, dry ingredients, liquids)

Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens

Evaluate it personally and seek evaluation from others

## Geography

#### Knowledge & Skills

Use fieldwork to observe, measure, record and present the human features using a range of methods, including sketch maps, plans and graphs and digital technologies

Plan a train journey, map the attractions and follow a street route

## History

The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

Give short term cause and consequence of the main events, situations and changes in the period studied

## Music

#### Music From Around The World

Sing a 3 part round and maintain own part.

Compose a simple melody using the pentatonic scale.

Identify key stylistic features of music from around the world.

## Christianity

# Why are signs of salvation important in a Church community?

Describe how signs of salvation in a church reinforce the Christian idea of forgiveness

Explain how the celebration of Easter links to the idea of Jesus reconciling people to God so that Christians can live forgiven in relationship with God

Suggest answers to questions that the resurrection of Jesus might raise

## French

Travelling in my town: transport and directions

## Computing

## **Online Safety**

Understand impact of sharing digital content, both appropriate and inappropriate

Review sources of support and own responsibilities

Know how to maintain secure passwords

About permissions and purposes of altering an image and reasons for this

Know how to reference work

## PSHE

KIVA Unit 2 Lesson 4 Aspirations: Lessons 1-3

RE

#### Roots & Routes

**Y5** Summer 1

## History

## Macclesfield & Silk Trade

Find and analyse a wide range of evidence about the past

Use a range of evidence to offer some clear reasons for different interpretations of events, linking this to factual understanding about the past

Consider different ways of checking the accuracy of interpretations of the past

Start to understand the difference between primary and secondary evidence and the impact of this on reliability

Know that people in the past represent events or ideas in a way that may be to persuade others

Begin to evaluate the usefulness of different sources

Appreciate how historical artefacts have helped us understand more about British lives in the present and the past

Be able to draw a timeline with different time periods outlined, which show different information such as periods of history and historical figures

Use dates and historical language to investigate work

Sequence historical periods, identifying changes within and across the historical periods

Compare past and present maps

Local area walk to identify key landmarks and compare buildings from different time periods

Handle and investigate historical artefacts

## French

•Mmmmm delicious!

## Collage

Explore expression of self through collage.

Encourage the use of sketches, photos, newspapers, magazines and the collection of found or meaningful objects and the application of different techniques to create a collage.

Art

Select and use cutting tools and adhesives with care to achieve a specific outcome.

Select and use found materials with art media and adhesives, assembling them carefully to represent an idea.

Design and create a collaborative piece of artwork.

## Geography

## Knowledge & Skills

Use four- and six-figure grid references (including the use of OS maps) to build knowledge of the locality and United Kingdom

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

Understand geographical similarities and differences through the study of human and physical geography of a region of the UK (locality & York)

Describe and understand key aspects of human geography, including trade links of the locality (then and now)

## Fieldwork

Use fieldwork to observe, measure, record and present the human features using a range of methods, including sketch maps, plans, graphs and digital technologies including: aerial photos of locality; exploring scale maps of locality (including tithe and digital maps); OS symbols; following a route map; calculating distances using different scales; drawing detailed maps and conducting a traffic survey in the locality

## Islam

The importance of the Five Pillars of Islam

RE

Explain and assess how all Muslims are part of 'Ummah' by showing how Five one' (Father, Son and Holy Spirit known as the Trinity)

## Music

## **Improvising** Colours

To improvise in simple ways using rhythms and scales

Explain how changes in performance affect mood and character of a piece of music

## Computing

## Game Creator

Plan a game

Design and create the game environment

Design and create the game quest

Finish and share the game

Self and peer evaluate

# PSHE

#### Money Matters

Lessons 1 & 2

#### Drugs & Alcohol Education

Lesson 1: Managing risks with medicines

Lesson 2: Managing risks—legal and illegal drug use

## Circle of Life

**Y5** Summer 2

#### Science

#### Working Scientifically

Explore and talk about their ideas; asking their own questions about scientific phenomena and analysing functions, relationships and interactions more systematically

## Living Things and their Habitats

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird

Describe the life processes of reproduction in some plants and animals

Raise questions about their local environment throughout the year

Find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall

Find out about different types of reproduction, including sexual and asexual reproduction in plants and sexual reproduction in animals

#### Animals, including Humans

Describe the changes as humans develop to old age

Draw a timeline to indicate stages of growth and development in humans Learn about the changes experienced in puberty

## PSHE

RSE- Lessons 1—3 Talking about puberty The Reproduction System Puberty help and support

## Enquiry

Take a concept and explore its relevance in religious/nonreligious worldviews e.g. love or peace. What do different world religions/world views say about life after death? Is death the end? Generate own questions

RE

Identify ways that Christians believe God is with them: prayer, worship, peace in hard times

Investigate by gathering, selecting, organising or refining questions and ideas about religious/non-religious viewpoints

Suggest lines of enquiry and plan investigations into religious/non-religious viewpoints

## Art

#### Painting

Create different effects by using a variety of tools and techniques such as dots, scratches and splashes, and applying paint in layers.

Create a colour palette using acrylic paint, demonstrating mixing techniques.

Use studies from close observation to help plan and realise paintings, using thumbhail studies and paint techniques to represent action, interaction or the 'impression' of a scene.

Show the effect of light and colour, texture and tone on natural and man-made objects.

## Computing

## Spreadsheets

Use formulae to convert measurements of length and distance

Use the count tool to answer hypotheses about common letters in use

Use a spreadsheet to model a real-life problem

Use formulae to calculate area and perimeter of shapes

Create formulae that use text variables

Use a spreadsheet to help plan e.g. a school cake sale

## French

Sport & Exercise

## Music

#### Newsbeat

Construct own radio broadcast around a news story

Understand how music rein-