

## Year 4 Autumn Term Skills and Knowledge

At Moorside Primary School our approach to our teaching and learning is through a skill based curriculum. Below are the subjects and skills being taught in the autumn term:

### **Science – Living things and their environment**

#### **Essential skills and knowledge**

- To recognise that living things can be grouped in a variety of ways
- To explore and use classification keys to help group, identify and name a variety of living things in the local and wider environment
- To recognise that environments can change and that this can sometimes pose dangers to living things

#### **Communication skills**

- To present data in a variety of ways to help in answering questions

#### **Problem solving**

- To find out information about habitats using reference books and search engines

#### **Information Technology**

- To use a various sources of research
- To use a key to identify living things from a software package

#### **Application of number**

- To make careful observations and measure length, mass, capacity using standard measures
- To record results in tables, charts, graphs and pictograms

### **Science – Electricity**

#### **Essential skills and knowledge**

- To identify common appliances that run on electricity
- To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- To identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- To recognise some common conductors and insulators, and associate metals with being good conductors

#### **Communication skills**

- To ask relevant questions
- To use straightforward scientific evidence to answer questions or to support findings

#### **Working together – collaborative skills**

- To work with a small group to carry out an experiment and ensure that the principles of fair testing are in place
- To work well with a partner to construct a variety of electrical circuits
- To become good at putting my point across
- To always be prepared to listen to the ideas of others

#### **Problem solving**

- To construct a range of electrical circuits and choose the resources independently

#### **Application of number**

- To make careful observations and measure length, mass, capacity using standard measures
- To record results in tables, charts, graphs and pictograms

### **Computing – E-Safety**

#### **Keeping safe**

- To use technology safely and respectfully
- To know a range of ways to report concerns and inappropriate behavior
- To develop a secure password
- To keep personal information safe by hiding identity
- To understand the procedures for reporting online incidents, share rules with others
- To understand how to protect against viruses

- To know who can view online information
- To understand how information sharing carries a responsibility
- To recognise immediately when online safety is compromised and know how to get support.
- To understand and use networks
- To use a search program and understand how to rank information
- To add an attachment to an email

## **Physical Education**

### ***Gymnastics – developing skills***

- To perform a range of actions with consistency, fluency and clarity of movement
- To make shapes on the floor and apparatus, working with a partner
- To combine actions and maintain the quality when performing with a partner

### ***Gymnastics – making and applying***

- To combine actions to make sequences, changing speed, level, direction and shape
- To gradually increase the length of sequences
- To work with a partner to make a short sequence on floor, mats and apparatus

### ***Gymnastics – physical and mental***

- To devise routines of stretching exercises that prepare for gymnastic work
- To discuss the reasons for routine choice and compare it with the routines of others

### ***Gymnastics – evaluate and improve***

- To make simple assessments of performance based on criteria given by teachers
- To refine sequences and others' sequences
- To offer constructive ideas when working with a partner

### ***Invasion games – Netball and hockey***

#### ***Invasion Games – developing skills***

- To use a range of techniques when passing
- To change direction and speed when dribbling the ball
- To show growing consistency and control in games
- To play with greater speed and flow

#### ***Invasion Games – making and applying***

- To keep and use rules I am given
- To suggest how rules could be changed to improve the game
- To adapt rules in agreement with others
- To use a range of tactics to keep possession of the ball and to attack a goal

#### ***Invasion Games – physical and mental***

- To demonstrate these skills with others giving reasons for choices
- To use knowledge learnt to make up suitable warm up activities

#### ***Invasion Games – evaluate and improve***

- To know, explain and use confidently tactics and skills in games
- To choose different ways of practicing these skills and tactics
- To describe the help needed to improve play

## **History - The Romans**

### ***Historical knowledge (constructing the past and sequencing the past)***

- To make some comments about things (features, events, people and themes) from the past
- To describe some features, events, people and themes from the past
- To sequence a few events, objects and pieces of information on a timeline
- To talk or write about features, events, people and themes from the past, to include some detail
- To place events, objects and pieces of information on a timeline
- To understand differences in political history
- To understand links between history and geography

### ***History concepts (change and development, cause and effect, significance and interpretations)***

- To understand a number of time terms such as how, when, yesterday, days, weeks, month, year, nowadays, past, old and new
- To use some historical period terms as well as century, decade, BC/BCE, AD/CE
- To make some comments about why people did things, why events happened and what happened as a result
- To pick out some reasons for and results of people's actions and events

- To point out which people were historically important
- To suggest which people were historically important and give reasons for this
- To use a time line to place events, periods and cultural movements
- To show changes in a time line

***Historical enquiry (planning and carrying out historical enquiry/using sources of evidence)***

- To pick out information about the past from sources like pictures
- To use a range of documents, books and printed sources
- To talk, draw and write to show ideas
- To make labeled drawings, tables and write sentences, speak (including in drama) and use ICT to show ideas
- To present findings about the past using speaking, writing, drama and drawing skills

**Geography – Europe including Russia**

***Location and place knowledge***

- To begin to recognize geographical patterns and identify through aerial photographs
- To understand why people choose to live in contrasting areas
- To locate the world's countries, using maps to focus on Europe concentrating on the environmental regions, key physical and human characteristics of major cities
- To locate the world's countries, using maps to focus on North and South America concentrating on the environmental regions, key physical and human characteristics of major cities
- To locate the world's countries, using maps to focus on Europe, North and South America concentrating on their environmental regions, key physical and human characteristics, countries and major cities
- On a world map to locate areas of similar environmental regions, either deserts, rainforests or temperate regions
- To locate the Tropic of Cancer and the tropic of Capricorn

***Physical and human geography***

- To describe and understand key aspects of physical geography, linked rivers and the water cycle
- To describe the main physical differences between cities and villages
- To consider the future of some physical and human features, based on an understanding of change

***Geographical skills and fieldwork***

- To use four figure grid references to locate points on a map
- To identify time differences around the world
- To use the eight points of the compass
- To use fieldwork to observe, measure and record human and physical features in the local area using a range of methods
- To carry out the above and include sketch maps, plans and graphs and digital technologies
- To carry out a survey to discover features of cities and vilages

**Art and design – Andy Goldsworthy (craft maker – sculptor)**

***Developing, planning and communicating ideas***

- To include expressions in drawings
- To use tone, texture and colour to communicate
- To develop the use of line, tone shape and colour
- To plan and develop ideas into 3D
- To produce creative work, exploring ideas and recording experiences
- To experiment with the style of different artists

***Working with tools, equipment, materials and components to make quality products***

- To use a sketchbook to begin to sort ideas
- To show tone and texture using hatching and cross hatching

***Evaluating processes and products***

- To describe how some techniques work
- To talk about work and things that other people have done
- To offer ideas to improve work
- To begin to work collaboratively

***Drawing and painting***

- To identify and draw simple objects
- To organise line, tone, shape and colour to represent figures
- To explain why specific materials have been chosen
- To select appropriate drawing materials

### **3D/collage and textiles**

- To experiment with and combine materials
- To use early textile and sewing skills as part of a project
- To give some reasons for decisions

### **Knowledge**

- To learn about great artists, architects and designers in history

### **Design and Technology – Textiles inspired by Vivienne Westwood**

#### **Developing, planning and communicating ideas**

- To come up with at least one idea about how to create the product
- To take account of the ideas of others when designing
- To produce a plan and explain it to others
- To collect and use information to generate ideas
- To consider the way the product will be used
- To take users views into account
- To produce step by step plans
- Link to science – To add electricity to create motion or make light

#### **Evaluating processes and products**

- To think of how to check the design is successful
- To suggest some improvements and say what was good and not so good about the original design
- To tell if the finished product is going to be good quality
- To take time to consider how the design could have been made better

#### **Textiles**

- To think what the user would want when choosing textiles
- To think about how to make the product strong
- To devise a template to explain how to join things in a different way

#### **Electricals**

- Link to science – To make a simple circuit
- Link to Science – To add things to a circuit
- Link to Science – To alter a product after checking it
- Link to Science – To be confident about trying out new and different ideas

### **Music – Evelyn Glennie and trumpets**

#### **Elements of music (listening and understanding)**

- Pitch – distinguish between steps, leaps and repeat in melodies ; major, minor and pentatonic scale
- Tempo – consolidate understanding of, and identify getting faster and slower
- Structure – identify development of musical ideas – similar but not the same

#### **Applying and understanding**

- To identify how combinations of elements are used in a variety of musical styles and to communicate musical effects
- To identify different families of instruments and their expressive qualities

#### **Controlling**

- To use instruments where appropriate including a range of un-tuned and tuned percussion with knowledge of correct technique

#### **Creating**

- To explore the ways sounds can be combined and used expressively
- To improvise longer repeated rhythmic patterns, building a repertoire of patterns and sequence
- To combine layers of sound with awareness of the combined effect

#### **Responding and reviewing**

- To build up an appropriate musical vocabulary
- To use musical vocabulary when talking about music and developing the ability to express an aesthetic response

### **Religious Education**

#### **RE – Autumn 1 – Hinduism beliefs and practices**

## RE – Autumn 2 – Meanings within Christmas and Diwali

### Modern Foreign Languages – French

#### **Oracy**

- To memorise and present a short spoken text
- To listen for specific words and phrases
- To ask and answer questions on a topic related study (possible country France)

#### **Literacy**

- To read a range of familiar written phrases
- To read and understand a range of familiar written phrases
- To read some familiar words and phrases aloud
- To write simple words using a model and some words from memory
- To write simple phrases using a model and some words from memory

#### **Intercultural Understanding**

- To know about festivals and celebrations in different cultures (France)

### **PHSE – Health and well being**

- To recognise that they may experience conflicting emotions and when they might need to listen to, or overcome these
- To recognise how their increasing independence brings increased responsibility to keep themselves and others safe
- To know that bacteria and viruses can affect health and that following simple routines can reduce their spread
- To know how pressure to behave in unacceptable, unhealthy or risky ways can come from a variety of sources, including people they know and the media
- To recognise when they need help and to develop the skills to ask for help; to use basic techniques for resisting pressure to do something dangerous, unhealthy, that makes them uncomfortable or anxious or that they think is wrong
- To know school rules about health and safety, basic emergency aid procedures, where and how to get help
- To know what is meant by the term 'habit' and why habits can be hard to change
- To know which, why and how, commonly available substances and drugs (including alcohol, tobacco and 'energy drinks') can damage their immediate and future health and safety; that some are restricted, and some are illegal to own, use and give to others
- To know strategies for keeping physically and emotionally safe including road safety (including cycle safety- the Bikeability programme), and safety in the environment (including rail, water and fire safety)
- To know strategies for keeping safe online; the importance of protecting personal information, including passwords, addresses and the distribution of images of themselves and others
- To know about people who are responsible for helping them stay healthy and safe; how they can help these people to keep them healthy and safe
- To know the responsible use of mobile phones: safe keeping (looking after it) and safe user habits (time limits, use of passcode, turning it off at night etc.)
- To know how to manage requests for images of themselves or others; what is and is not appropriate to ask for or share; who to talk to if they feel uncomfortable or are concerned by such a request