

#### Year 6 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 habitats

#### Essential skills and knowledge

- To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- To give reasons for classifying plants and animals based on specific characteristics

#### Communication skills

To discuss reasons why living things are placed in one group and not another

## Problem solving

• To classify animals into commonly found invertebrates (such as insects, spiders, snails, worms) and vertebrates (fish, amphibians, reptiles, birds and mammals)

#### Information Technology

• To find out about the significance of the work of scientists such as Carl Linnaeus (pioneer of classification)

### Science – Electricity

#### Essential skills and knowledge

- To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the one/off position of switches
- To use recognised symbols when representing a simple circuit in a diagram

#### **Communication skills**

To explain how to work with electricity

#### Problem solving

- To construct simple series circuits to help answer questions about what happens when different components are tried e.g. switches, buzzers, bulbs and motors
- To design and make a set of traffic lights, a burglar alarm or another useful circuit
- To represent a simple circuit in a diagram using recognised symbols

## Computing – E-Safety

# Programming and making things work with understanding

- To use sound/images/text/transitions/hyperlinks/html code effectively for presenting work
- To add special effects to work
- To add, amend and combine different forms of information in different ways
- To use a range of concepts and ideas when presenting across different subjects

## To use and add menu options, including hyperlinks

#### Network and Internet

- To collect, analyse, evaluate and present data and information
- To use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content
- To use search engines as part of effective research
- To describe how search results are selected and ranked
- To use email attachments, upload documents to shared space in order to understand protocols
- To make a home page for a website

#### Keeping safe

- To use technology safely, respectfully, responsibly; know a range of ways to report concerns and inappropriate behavior
- To behave responsibly and respectfully online
- To understand how and when to use social networking sites appropriately
- To know how to be safe online

- . To understand how information sharing carries a responsibility
- To recognise the risks and rewards when using the internet
- To respect the privacy of themselves and others
- To demonstrate to others how to stay safe online

## **Physical Education**

## Dance - Developing skills

- To respond to a range of stimuli, improvising freely using a range of controlled movements and patterns
- To explore dance and movement ideas imaginatively, including actions, dynamics, space and relationship Dance - Making and applying
  - To select and use a range of compositional ideas to create motifs that demonstrate my dance idea
- To perform to an accompaniment, communicating a dance idea on my own, with a partner and in a group Dance - Physical and mental

- To describe how dance contributes to fitness and wellbeing
- To identify what types of exercise I need to do to help my dancing

## Dance - Evaluate and improve

- To use appropriate language and terminology to describe, interpret and evaluate my own and others' work
- To comment on what works well and explain why
- To recognise how costume, music and set can help to improve a dance performance

## **Outdoor/ Adventure - Developing skills**

- To read a variety of maps and plans accurately, recognising symbols and features
- To use physical and teamwork skills well in a variety of different challenges

# Outdoor/ Adventure - Making and applying

- To successfully apply my skills and understanding to new challenges and environments
- To recognise similarities between challenges and choose efficient approaches to new ones

## Outdoor/ Adventure - Physical and mental

- To understand the excitement and enjoyment of completing a challenge
- To know how to prepare physically and organisationally to be safe and efficient
- **Outdoor/ Adventure Evaluate and improve** 
  - To be clear about what I have to achieve and recognise the importance of planning and thinking as I go
  - · To identify what I have done well and adapt plans to be more efficient when facing similar challenges

## History - World War 2

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

- To talk or write about features, events, people and themes from the past, including some detail
- To talk or write about the past, including detail: to show that connections can be made with features of other period studied
- To talk or write about the past, including detail and ideas which show some understanding
- To talk and write about the past, include good detail and put ideas into context (chronological and scale)

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

- To point out some similarities and differences between aspects of life at different times in the past .
- To describe some changes in historical period being studied
- To describe changes within and between peiods and societies learnt
- To pick out some reasons for and results of peoples actions and events .
- To suggest reasons for and results of peoples actions and events .
- To give some reasons for and results of historical events, situations and changes .
- To explain suggestions when giving reasons for and results of historical events, situations and changes
- To point out which people were historically important and give reasons why

## To speculate - what if?

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

- To compare different sources of evidence about a person, object, event or change in history and point out some • similarities and differences
- To comment on the usefulness and accuracy of different sources of evidence
- To say which sources (from a selection) are likely to be the most useful for a task
- To identify primary and secondary sources of evidence
- To compare sources of evidence to help identify reliable information

- To explain evaluations made of particular pieces of information and particular sources
- To understand the role of opinion and propaganda

## Geography – Cities of the UK and Europe

## Location and place knowledge

- To name and locate countries and cities of the United Kingdom
- To name and locate countries and cities of the UK, geographical regions and their identifying human and physical characteristics
- To name and locate key topographical features including coasts and rivers and land-use patterns
- To name and locate geographical regions and their identifying key topographical features (including hills, mountains, coasts and rivers) and land-use patterns; and understand how some of these aspects have changed over time
- To recognise key symbols used on ordnance survey maps
- To demonstrate an understanding of geographical similarities and differences through the study of key features of a region of the UK and a region of a European Country
- To demonstrate an understanding of geographical similarities and differences through a study human and physical geography of a region of the UK

## Physical and human geography

- To discuss, describe and understand key aspects of human geography, including: types of settlement and land use, economic activity
- To describe and understand human geography, including economic activity, including trade links and the distribution of natural resources including energy, food, minerals and water
- To describe how some places are similar and others are different in relation to their human features

## Geographical enquiry

- To use a compass to follow a route
- To identify the main environmental regions, key physical and human characteristics and major cities
- To link with local history; map how land use has changed in the local area over time
- To name and locate the key topographical features including coast, features of erosion, hills, mountains and rivers
- To demonstrate an understanding of how these features have changes over time
- To confidently explain scale and use maps with a range of scale
- To choose the best way to collect information needed and decide the most appropriate units of measure
- To use OS maps to answer questions
- To use maps, aerial photos, plans and web resources to describe what a locality might be like
- To extend to six figure grid references with teaching of latitude and longitude in depth
- To use fieldwork to observe and measure and record the key features in the local area using a range of methods
- To do the above using sketch maps, plans and graphs and digital technologies
- To suggest relevant issues for further study
- To carefully select sources of evidence and sift information
- To analyse data e.g. population data using similarity and difference
- To create sketch maps and carry out a field study
- To collect statistics about people and places, and set up a database from fieldwork or research
- To speculate and hypothesis about what is found
- To give an extended description of the human features of different places around the world
- To suggest plausible conclusions, and back up with evidence

# Art and design – World War 2 – Henry Moore (Artist)

- Developing, planning and communicating ideas
  - To use marks and line to produce texture
  - To use line, tone, shape and colour
  - To use a sketch book to develop own ideas
  - To have a mastery of art and design techniques, including drawing, painting and sculpture with a range of materials

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

To work with clay and other mouldable materials in varying scales

## Evaluating processes and products

To describe how/why specific techniques work

#### Drawing and painting

To choose to use a limited range of colour to produce a chosen effect

## 3D/Collage and textiles

- To create work which is open to interpretation by the audience
- To talk about chosen materials

#### Knowledge

- To know about the great artists, architects and designers in history
- To talk about their work and discuss materials and approaches used
- To know how art and design both reflect and shape our history
- To talk about how art and culture contribute to the culture, creativity and wealth of our nation

#### Design and Technology – Food - rationing

## Developing, planning and communicating ideas

- To work within constraints
- To consider culture and society in own designs
- To keep cost constraints in mind when selecting materials in design
- To use knowledge of e.g. science and art when designing

## Evaluating processes and products

- To test and evaluate final product
- To think of ways to improve the product
- To consider whether different resources would have improved the product

#### Cooking and nutrition

- To explain how a product should be stored with reasons
- To set out to grow own products with a view to making a salad, taking account of time required to grow different foods
- To understand and apply the principles of a healthy and varied diet
- Understand seasonality and know where and how a variety of ingredients are grown, reared and caught
- To use a variety of cooking equipment: scales, knives, utensils
- To read and understand food labels
- To understand about nutritional principles such as a balanced diet, five a day and eating processed foods
- To calculate the amount of materials needed and use this to estimate cost
- Mechanisms and Structures (link to Science Electricity)
  - To use different kinds of circuits in a product
  - To incorporate switches in a product
  - To think of ways in which adding a circuit would improve the product

## Music - Singing

# Elements of music (listening and understanding)

- Duration: understand irregular rhythmic groupings, such as fives, sevens
- Timbre: identify families of instruments, and different ensemble combinations e.g. jazz band, orchestra and choir

Structure: understand and identify contrasting style arrangements, theme and variations
 polying and understanding

# Applying and understanding

- To describe what is heard using a wider range of musical vocabulary
- To identify instruments within different families of instruments, end electronic sounds
- To use and explore notations linked to understanding of elements to communicate own musoical ideas e.g. performance instructions

#### Controlling

- To use a wide range of instruments with confidence demonstrating knowledge of correct technique
- To maintain ostinato patterns and sequences in all metres (a continually repeated musical phrase or rhythm)
- To rehearse and present performances in independent groups, commenting on how intentions have been achieved

To maintain own part with awareness of how the different parts fir together

#### Creating

- To improvise in a variety of styles, using scales as a base
- To improvise melodic and rhythmic phrases as part of a group performance
- To vary and refine ideas

# <u>RE</u>

#### Autumn 1 RE – People's perspective and impressions of Jesus

#### Autumn 2 RE – God as Spirit

#### <u> Modern Foreign Languages – French</u>

Oracy

To use some spoken language to sustain a simple conversation or tell a story

## Literacy

To read and understand the main points from a short story

#### Real life contexts

To have the opportunity to practice conversational skills in role play

#### <u> PSHE – Relationships</u>

- To recognise what constitutes a positive, healthy relationship and develop the skills to form and maintain positive and healthy relationships
- To recognise ways in which a relationship can be unhealthy and whom to talk to if they need support
- To recognise different types of relationship, including those between acquaintances, friends, relatives and families
  To know that civil partnerships and marriage are examples of a public demonstration of the commitment made between two people who love and care for each other and want to spend their lives together and who are of the legal age to make that commitment
- To know that marriage is a commitment freely entered into by both people, that no one should marry if they don't absolutely want to do so or are not making this decision freely for themselves
- To know that their actions affect themselves and others
- To judge what kind of physical contact is acceptable or unacceptable and how to respond
- To know the concept of 'keeping something confidential or secret', when they should or should not agree to this and when it is right to 'break a confidence' or 'share a secret'
- To listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to
  recognise and care about other people's feelings and to try to see, respect and if necessary constructively
  challenge others' points of view
- To work collaboratively towards shared goals
- To develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves
- To know that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial and religious diversity, age, sex, gender identity, sexual orientation, and disability
- To realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, 'trolling', how to respond and ask for help)
- To recognise and manage 'dares'
- To recognise and challenge stereotypes
- To know about the difference between, and the terms associated with, sex, gender identity and sexual orientation
- To know how to recognise bullying and abuse in all its forms (including prejudice-based bullying both in person, online and through social media)
- To know that forcing anyone to marry is a crime; that support is available to protect and prevent people from being forced into marriage and to know how to get support for them self or others
- To understand personal boundaries; to identify what they are willing to share with their most special people; friends; classmates and others; and that we all have rights to privacy