

## Year 5 Spring 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 spring term:

### **Science – Earth and space**

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

- To describe the movement of the Earth and other planets relative to the sun in the solar system
- To describe the movement of the moon relative to the Earth
- To describe the sun, Earth and moon as approximately spherical bodies
- To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

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

- To work with others to research the eight planets of the Solar System
- To work with others to create a model of the Solar System

### **Science – Materials and their properties**

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

- To compare and group together everyday materials on the basis of their properties, including their hardness and solubility
- To compare the above to include transparency, conductivity (electrical and thermal), and response to magnets
- To know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- To use knowledge of solids, liquids and gases to decide how mixtures might be separated
- To use the above knowledge to include filtering, sieving and evaporating
- To give reasons, based on evidence from comparative and fair tests
- The above can include particular uses of everyday materials, including metals, wood and plastic
- To demonstrate that dissolving, mixing and changes of state are reversible changes
- To explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible
- To include in the above changes associated with burning and the action of acid on bicarbonate of soda

#### ***Communication skills***

- To explain that some changes result in the formation of new materials and that this kind of change is not usually reversible
- To give reasons based on evidence from comparative and fair tests

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

- To discuss things such as which materials would be most effective for making a warm jacket for wrapping ice cream to stop it melting

#### ***Problem solving***

- To demonstrate that dissolving, mixing and changes of state are reversible changes

#### ***Application of number***

- To make quantitative measurements about conductivity and insulation

#### ***Information Technology***

- To use ICT to explain hypothesis, methods and results
- When recording results, to use a digital camera, iPod or iPad independently
- To use the internet to find out about how chemists create new materials

### **Computing – Networking and Internet**

#### ***Network and internet***

- To use a range of technology to present information for an audience
- To combine media in order to present information effectively
- To share using a variety of tools both on and offline
- To evaluate and refine to produce effective presentations
- To understand how they can provide multiple services, such as the world-wide web
- To understand the opportunities they offer for communication and collaboration

- To use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content
- To understand that online content should not be adapted without permission or acknowledgement
- To understand the importance of evaluating online information
- To understand how different devices connect to the internet
- To understand how to share and collaborate online using blogs, wikis, messaging

**Keeping safe**

- To make good choices when they present themselves online
- To know how to protect online identity
- To choose a secure password
- To understand how to use social networking sites appropriately

**Physical Education**

***Dance - Developing skills***

- To choose appropriate material to create new motifs in a dance style
- To perform specific skills and movement patterns and different dance styles with accuracy

***Dance - Making and applying***

- To compose, develop and adapt motifs to make dance phrases and use these in longer dances

***Dance - Physical and mental***

- To warm up and cool down independently
- To use exercises that stretch and tone my body

***Dance - Evaluate and improve***

- To use dance terminology to identify different styles of dance
- To talk about the relationship between the dance and its accompaniment
- To suggest ways to develop my technique and composition

***Dance - Main progression points:***

- To compose, develop and adapt motifs to make longer dances (6-8 movements)
- To show extension, clear body shape and changes in direction in phrases with partner or small group (6-8 actions)

**Invasion games – Basketball and hockey**

***Invasion Games - Developing skills***

- To perform skills with accuracy, confidence and control
- To know the difference between attacking skills and defending skills

***Invasion Games - Making and applying***

- To choose positions in my teams and know how to help attack
- To use a variety of tactics to keep the ball
- To know and find ways to get the ball towards the opponents' goal
- To know how to mark and defend their goal

***Invasion Games - Physical and mental***

- To suggest ideas for warming up, explaining my choice
- To recognise activities that help strength, speed and stamina

***Invasion Games - Evaluate and improve***

- To look for specific things in a game and explain if they are being done well

***Invasion Games - Main progression points:***

- To know the difference between attacking and defending skills
- To find ways to get ball to opponents' goal and mark/defend their own

**History – Crime and punishment since 1066**

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

- To talk and write about the past, show that there are some connections with features of other periods studied
- To talk and write about the past and include ideas which show some understanding of what things were like before and after this locally
- To talk and write about the past and include ideas which show some understanding of what things were like before and after this at a local, national and world level
- To place a number of events, objects, themes and people from topics studied on a timeline
- To place historical periods studied as well as information about topics on a timeline

- To use dates and historical period terms accurately
- To explain own point of view and justify this with a broad range of evidence
- To adapt ideas and viewpoints as new information arises

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

- To point out some similarities and some differences between the ways of life different people living at the time being studied
- To describe similarities and differences in society, culture and religion in Britain at a local level
- To describe similarities and differences in society, culture and religion in Britain at local and national levels
- To make some comments about why people did things, why events happened and what happened as a result
- To suggest reasons for and results of people's actions and events
- To identify changes across periods of time, using chronological links
- To begin to identify casual factors in change

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

- To comment on the usefulness and accuracy of different sources of evidence
- To identify primary and secondary sources of evidence
- To compare sources of evidence to help identify reliable information
- In written answers to be well rounded with well organised clear conclusions supported by evidence from sources
- To use graphs and charts to confirm information from different sources
- To support own point of view using evidence
- To give a balanced view of the past, using different points of view
- To make conclusions with evidence as the most likely version of events

**Geography – Comparison study of a North American and European country**

**Geographical knowledge (location)**

- To locate the USA and Canada on a world map and atlas
- To locate the world's countries, using maps to focus on Europe
- To locate the worlds 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
- To demonstrate an understanding of geographical similarities and differences through study of human and physical geography of a region in a European Country
- To identify the position and significance of the Prime/Greenwich Meridian and time zones (including day and night)

**Physical and human geography**

- To describe and begin to explain patterns and physical and human changes
- To describe and understand key aspects of physical geography, including: climate zones and biomes
- To describe and understand key aspects of physical geography including vegetation belts
- To explain how a location fits into its wider geographical location; with reference to physical features
- To describe and understand key aspects of human geography, including types of settlement and land use
- To describe and understand key aspects of human geography, including economic activity including trade links and the distribution of natural resources including energy, food, minerals and water
- To describe and understand key aspects of the distribution of natural resources focusing on energy
- To explain what a place might be like in the future, taking account of issues impacting on human features

**Geographical skills and fieldwork**

- To suggest suitable questions for a field work study
- To rank information found into order of importance
- To come to an accurate conclusion, using information
- To make careful measurements – e.g. rainfall, noise level, distance
- To collect statistics about people and places
- To begin to use a range of graphs, including pie charts
- To use maps, atlases and globes and digital/computer mapping to locate countries and describe features studied
- To use the eight points of the compass, four and six-figure grid references, symbols and key, including the use of the Ordnance Survey map
- To work out a journey time, using their knowledge of time zones
- To use the above to build on knowledge of the United Kingdom in the past and present and the wider world
- To make improvements with accuracy of my sketches and plans
- To collect information about a place and use it in a report
- To plan a journey to a place in another part of the world, taking account of distance and time

## **Art and design – Famous sculptor (Auguste Rodin)**

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

- To use marks to produce texture

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

- To select and use a variety of materials to create mood and feelings in my work
- To work with clay and other mouldable materials

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

- To work collaboratively
- To select materials and tools and give reasons for my decisions
- To evaluate and analyse creative works using the language of art, craft and design
- To analyse when commenting on ideas

### ***Drawing and painting***

- To use marks and lines to produce texture
- To organise line, tone, shape and colour to represent figures

### ***Printing and sketching***

- To experiment with combinations of materials and techniques

### ***3D/Collage and textiles***

- To sculpt clay and other mouldable materials
- To use inspiration from other cultures

### ***Knowledge***

- To demonstrate an understanding of the historical and cultural development of art forms

## **Design and Technology - Mechanical - pulley**

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

- To come up with a range of ideas after collecting information
- To produce a detailed step-by-step plan
- To use a range of tools and equipment expertly
- To make measurements that are accurate enough to ensure that product design is strong and fit for purpose
- To be motivated enough to refine and further improve the product using mouldable materials
- To make more complex designs to include belts and pulleys, and a combination of other mechanisms
- To use sketches to show other ways of doing things – and then make choices

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

- To keep checking that designs are the best that it can be
- To check whether anything can be improved
- To refine the quality of the finished product, including making annotations on the design
- To clarify ideas through drawing and modeling

### ***Mechanisms and structures***

- To refine a product after testing it
- To incorporate hydraulics and pneumatics
- To make measurements that are accurate enough to ensure that product design is strong and fit for purpose
- To be motivated enough to refine and further improve products using moldable materials
- To carry out tests to see if designs work
- To make improvements from design suggestions
- To measure and cut precisely to millimetres
- To make strong and stable joints to stand the test of time

## **Music - Holst and singing**

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

- **Tempo:** understand and identify how the full range of tempi can be manipulated for expressive effect
- **Dynamics:** understand how the full range of dynamics can be manipulated for expressive effect
- **Structure:** understand chord sequences, leitmotif (a recurrent theme throughout a musical or literary composition, associated with a particular person, idea or situation)

### ***Applying and understanding***

- To use and explore notations which are linked to understanding of elements to communicate own musical ideas, including expressive markings
- To identify how elements and resources have combined to communicate moods, changes of mood and ideas, and a variety of musical styles

### ***Creating***

- To improvise melodic and rhythmic phrases as part of a group performance

- To use specific patterns of pitch and rhythm to give pieces shape and coherence
- To begin to use simple chord sequences to structure pieces

***Responding and reviewing elements of music***

- To improve their own and others work with an awareness of the music's context and purpose
- To recognise differences between music of different cultures

**RE**

**Spring 1 RE – Expressing Religious Faith through the Arts**

**Spring 2 RE – Places of worship**

**Modern Foreign Languages – French**

***Oracy***

- To listen attentively and understand more instructions and classroom phrases

***Literacy***

- To make simple sentences
- To make short texts
- To write words and phrases using a reference/model

***Intercultural understanding***

- To look at further aspects of their everyday lives from the perspective of someone from another country

***Real life contexts***

- To have had the opportunity to practice conversational skills in role play

**PSHE – Relationships**

- 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 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) Recognise and challenge stereotypes
- 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