

## Year 6 Curriculum Statement 2011-2012

At The Prague British School we use the English National Curriculum to cover the subjects of English and Mathematics and The International Primary Curriculum (IPC) to cover all other subjects, which are taught through an integrated approach.

The following IPC Units of Work are covered in Year 6:

Class	Term 1	Term 2	Term 3
<b>Year 6</b>	Rivers (11)  Mars (6)	Trading (7)  Growing Up (4) (Drug Education)	Making the News (9) (Start in Term 2)  Olympics (4)

### English (Literacy)

#### Speaking

- Use a range of oral techniques to present persuasive arguments and engaging narratives
- Participate in whole-class debate using the conventions and language of debate, including standard English
- Use the techniques of dialogic talk to explore ideas, topics or issues

#### Listening and Responding

- Make notes when listening for a sustained period and discuss how note-taking varies depending on context and purpose
- Analyse and evaluate how speakers present points effectively through use of language and gesture
- Listen for language variation in formal and informal contexts
- Identify the ways spoken language varies according to differences in the context and purpose of its use

#### Group discussion and interaction

- Consider examples of conflict and resolution, exploring the language used
- Understand and use a variety of ways to criticise constructively and respond to criticism

#### Word structure and spelling

- Spell familiar words correctly and employ a range of strategies to spell difficult and unfamiliar words
- Use a range of appropriate strategies to edit, proofread and correct spelling in their own work, on paper and on screen

#### Understanding and interpreting texts

- Appraise a text quickly, deciding on its value, quality or usefulness
- Understand underlying themes, causes and points of view
- Understand how writers use different structures to create coherence and impact
- Explore how word meanings change when used in different contexts
- Recognise rhetorical devices used to argue, persuade, mislead and sway the reader

#### Engaging and responding to texts

- Read extensively and discuss personal reading with others, including in reading groups
- Sustain engagement with longer texts, using different techniques to make the text come alive
- Compare how writers from different times and places present experiences and use language

#### Creating and shaping texts

- Set their own challenges to extend achievement and experience in writing
- Use different narrative techniques to engage and entertain the reader
- In non-narrative, establish, balance and maintain viewpoints
- Select words and language drawing on their knowledge of literary features and formal and informal writing
- Integrate words, images and sounds imaginatively for different purposes

#### Text structure and organization

- Use varied structures to shape and organise text coherently
- Use paragraphs to achieve pace and emphasis

## English continued

### Sentence structure and punctuation

- Express subtle distinctions of meaning, including hypothesis, speculation and supposition, by constructing sentences in varied ways
- Use punctuation to clarify meaning in complex sentences

### Presentation

- Use different styles of handwriting for different purposes with a range of media, developing a consistent and personal legible style
- Select from a wide range of ICT programs to present text effectively and communicate information and ideas

## Mathematics (Numeracy)

### Using and applying mathematics

- Solve multi-step problems, and problems involving fractions, decimals and percentages; choose and use appropriate calculation strategies at each stage, including calculator use
- Tabulate systematically the information in a problem or puzzle; identify and record the steps or calculations needed to solve it, using symbols where appropriate; interpret solutions in the original context and check their accuracy
- Suggest, plan and develop lines of enquiry; collect, organise and represent information, interpret results and review methods; identify and answer related questions
- Represent and interpret sequences, patterns and relationships involving numbers and shapes; suggest and test hypotheses; construct and use simple expressions and formulae in words then symbols
- Explain reasoning and conclusions, using words, symbols or diagrams as appropriate

### Counting and understanding number

- Find the difference between a positive and a negative integer, or two negative integers, in context
- Use decimal notation for tenths, hundredths and thousandths; partition, round and order decimals with up to three places, and position them on the number line
- Express a larger whole number as a fraction of a smaller one; simplify fractions by cancelling common factors; order a set of fractions by converting them to fractions with a common denominator
- Express one quantity as a percentage of another (e.g. express £400 as a percentage of £1000); find equivalent percentages, decimals and fractions
- Solve simple problems involving direct proportion by scaling quantities up or down

### Knowing and using number facts

- Use knowledge of place value and multiplication facts to  $10 \times 10$  to derive related multiplication and division facts involving decimals (e.g.  $0.8 \times 7$ ,  $4.8 \div 6$ )
- Use knowledge of multiplication facts to derive quickly squares of numbers to  $12 \times 12$  and the corresponding squares of multiples of 10
- Recognise that prime numbers have only two factors and identify prime numbers less than 100; find the prime factors of two-digit numbers
- Use approximations, inverse operations and tests of divisibility to estimate and check results

### Calculating

- Calculate mentally with integers and decimals:
- Use efficient written methods to add and subtract integers and decimals, to multiply and divide integers and decimals by a one-digit integer, and to multiply two-digit and three-digit integers by a two-digit integer
- Relate fractions to multiplication and division (e.g.  $6 \div 2 = \frac{1}{2}$  of 6 =  $6 \times \frac{1}{2}$ ); express a quotient as a fraction or decimal (e.g.  $67 \div 5 = 13.4$  or  $13\frac{2}{5}$ ); find fractions and percentages of whole-number quantities
- Use a calculator to solve problems involving multi-step calculations

## **Mathematics continued**

### **Understanding shape**

- Describe, identify and visualise parallel and perpendicular edges or faces; use these properties to classify 2-D shapes and 3-D solids
- Make and draw shapes with increasing accuracy and apply knowledge of their properties
- Visualise and draw on grids of different types where a shape will be after reflection, after translations, or after rotation through  $90^\circ$  or  $180^\circ$  about its centre or one of its vertices
- Use coordinates in the first quadrant to draw, locate and complete shapes that meet given properties
- Estimate angles, and use a protractor to measure and draw them, on their own and in shapes; calculate angles in a triangle or around a point

### **Measuring**

- Select and use standard metric units of measure and convert between units using decimals to two places (e.g. change 2.75 litres to 2750 ml, or vice versa)
- Read and interpret scales on a range of measuring instruments, recognising that the measurement made is approximate and recording results to a required degree of accuracy; compare readings on different scales, for example when using different instruments
- Calculate the perimeter and area of rectilinear shapes; estimate the area of an irregular shape by counting squares

### **Handling data**

- Describe and predict outcomes from data using the language of chance or likelihood
- Solve problems by collecting, selecting, processing, presenting and interpreting data, using ICT where appropriate; draw conclusions and identify further questions to ask
- Construct and interpret frequency tables, bar charts with grouped discrete data, and line graphs; interpret pie charts
- Describe and interpret results and solutions to problems using the mode, range, median and mean

## **Science**

In Science, children learn about the animate and inanimate world around them.

They learn this through the skills and areas of enquiry, living things, materials and physical processes.

### **Enquiry**

- Know that the study of science is concerned with investigating and understanding the animate and inanimate world around them
- Be able to conduct scientific investigations
- Be able to gather evidence from a variety of sources
- Be able to discriminate between evidence and opinion
- Understand the importance of using evidence to test scientific ideas
- Understand some of the effects of what they learn on people's lives

### **Living Things**

- Know about the major classifications of living things
- Know about the effects of food chains in a variety of environments
- Know that changes in the environment have effects on living things
- Know about the nature, functions and effects of micro-organisms
- Be able to recognise and name the major plants and animals in the host country
- Be able to classify locally occurring plants and animals according to their features
- Be able to recognise and name the major plants and animals in their home country
- Understand the relationship between living things and the environment in which they live
- Know about the structure of the human body
- Know the functions of the major internal and external parts of the human body
- Know about similarities and differences between humans and other creatures
- Know about the effect of exercise on the human pulse rate
- Know about the effect of drug misuse on the human body

### Science (Living Things) continued

- Know about the ways in which humans and other animals reproduce
- Know that some characteristics of humans and other animals are inherited from their parents
- Know that some characteristics of humans are influenced by their environment
- Understand the importance of an appropriate diet for the health of humans and other animals
- Know that some characteristics of plants are inherited from their parents
- Know about the functions of the major parts of a plant
- Know about factors that affect the growth of plants
- Know about the function of roots in anchoring and feeding plants
- Know about ways in which plants reproduce
- Know about the effects of seed dispersal
- Know about the conditions needed for germination

### Materials

- Know the distinctive properties of different materials
- Know about the principles of materials acting as thermal insulators
- Know what happens when materials are heated and cooled
- Know about the principles of condensation and evaporation
- Know about differences between metals and other materials
- Know that matter is made up of particles
- Know about the different arrangements of particles in solids, liquids and gases
- Be able to compare and group rocks and soils according to their properties
- Be able to group and classify materials according to their properties
- Be able to identify changes that are reversible or irreversible
- Be able to separate simple mixtures
- Be able to recover dissolved solids through evaporation

### Physical Processes

- Know that heat is often produced as a by-product when one form of energy is converted to another
- Know that heat can move from one object to another by conduction
- Be able to represent electrical circuits in drawings using conventional symbols
- Be able to construct circuits on the basis of drawings using conventional symbols
- Be able to vary an electrical circuit to change its effect
- Know about the nature and effect of gravitational force
- Be able to identify the effects of physical forces
- Be able to measure forces
- Be able to identify the direction of forces
- Know that light travels in a straight line until it strikes an object
- Know that light can be reflected, refracted or absorbed
- Know that light travels through some materials and not through others
- Know that we see things when light from them enters our eyes
- Know how sounds are changed by altering the nature and frequency of the vibrations
- Know that vibrations from sound sources travel through a medium to reach the ear
- Be able to identify the effects and uses of light and sound
- Know about the relationship between the Earth and the rest of the solar system
- Know that day and night are related to the Earth spinning on its axis
- Know about the time taken for the Earth to orbit the sun and for the moon to orbit earth
- Know about the effects caused by the Earth moving
- Know that patterns of stars in the sky stay the same
- Be able to identify the major constellations
- Know about the major sources of energy
- Know how energy sources occur

### Science (physical Processes) continued

- Know how energy sources are obtained
- Know how energy sources are used
- Know the basic principles of renewable and sustainable energy

### ICT

In ICT, children learn about applying technology in order to gather, use and exchange information.

- Know that the study of ICT is concerned with applying technology to gather, use and exchange information
- Know about an increasing number of applications of ICT for leisure, communication and work
- Be able to frame questions appropriately when gathering and interrogating information
- Be able to interpret their findings
- Be able to identify whether their findings are valid
- Be able to manipulate and combine different forms of information from different sources
- Be able to use ICT to present information in a variety of forms
- Be able to exchange information and ideas in a number of different ways
- Be able to use ICT to control events
- Be able to use ICT to sense physical data
- Be able to use ICT-based models and simulations
- Understand that the quality of information affects the results of any enquiry
- Understand the importance of considering audience and purpose when presenting information

### History

In History, children learn about the past in relation to the present.

- Know that the study of history is concerned with the past in relation to the present
- Know about the characteristic features of particular periods and societies
- Know about the general history of the host country
- Know about the general history of their home country
- Know about the characteristic features of a particular period in the history of the host country
- Know about the ideas, beliefs, attitudes and experiences of people in the past
- Know about the social, cultural, religious and ethnic diversity of the periods studied
- Know the terms associated with the periods they have studied
- Be able to enquire into historical issues and their effects on people's lives
- Be able to find out about aspects of the past from a range of sources
- Be able to describe and identify reasons for and results of historical events, situations, and changes in the periods they have studied
- Be able to describe and make links between the main events, situations and changes both within and across periods
- Be able to describe how the history of the host country affects the lives of people who live there now
- Be able to describe how the history of one country affects that of another
- Be able to ask and answer questions about the past
- Be able to select and record information relevant to an historical topic
- Be able to place the events, people and changes in the periods they have studied into a chronological framework
- Be able to use dates and terms relating to the passing of time
- Be able to communicate their knowledge and understanding of history in a variety of ways, making appropriate use of dates and historical terms
- Understand how some aspects of the past have been represented and interpreted in different ways
- Understand that historical sources can be different from and contradict

## **Geography**

In Geography, children learn about places and environments in the world around them.

- Know that the study of geography is concerned with places and environments in the world around them
- Know about the main physical and human features and environmental issues in particular localities
- Know about similarities and differences between particular localities
- Know how the features of particular localities influence the nature of human activities within them
- Know about recent and proposed changes in particular localities
- Know about the major geographical features of the host country
- Know about the geography of the area around the school
- Know about the major geographical features of their home country
- Know about the weather and climatic conditions in their home country and how they affect the environment and the lives of people living there
- Know about the weather and climatic conditions in the host country and how they affect the environment and the lives of people living there
- Know how people affect the environment
- Be able to enquire into geographical factors and their effects on people's lives
- Be able to use a variety of sources to gather geographical information
- Be able to collect and record evidence to answer geographical questions
- Be able to identify geographical patterns and to use their knowledge and understanding to explain them
- Be able to use appropriate geographical vocabulary to describe and interpret their surroundings
- Be able to use instruments to make measurements
- Be able to use appropriate techniques to gather information
- Be able to make plans and maps in a variety of scales using symbols and keys
- Be able to use and interpret globes and maps in a variety of scales
- Be able to use maps in a variety of scales to locate the position and geographical features of the host country and town, their home country and town, other countries and towns in which they and their peers have lived
- Be able to explain how physical and human processes lead to similarities and differences between places
- Be able to explain how places are linked through movement of goods and people
- Be able to communicate their knowledge and understanding of geography in a variety of ways
- Understand how localities are affected by natural features and processes
- Understand how and why people seek to manage and sustain their environment
- Understand how the geographical features of the host country affect the lives of the people who live there

## **Art**

In Art, children learn about visual and tactile expression and communication.

- Know that the study of art is concerned with visual and tactile expression and communication
- Know how artists, craftspeople and designers from a variety of traditions – including those of their home country and the host country – use materials, forms and techniques to express their emotions, observations and experiences
- Be able to use a wide variety of materials, forms and techniques to express their emotions, observations and experiences
- Be able to communicate through visual and tactile forms
- Be able to improve their own work
- Be able to make judgments about works of art, showing understanding, appreciation, respect and enjoyment as appropriate
- Be able to consider works of art in terms of meaning, design, materials, technique, place and time
- Understand that the work of artists is influenced by their environment and that artists have an effect on the environment

## **Music**

In Music, children learn about musical expression and communication.

- Know that the study of music is concerned with musical expression and communication
- Know how a number of musicians – including some from their home country and the host country – combine musical elements within a structure
- Be able to sing songs in unison and in two parts
- Be able to play tuned and untuned instruments with control and rhythmical accuracy
- Be able to perform as part of an ensemble
- Be able to perform with an awareness of audience
- Be able to compose musical pieces combining musical elements within a structure
- Be able to improve their own work having regard to purpose
- Be able to listen attentively with attention to detail
- Be able to make judgements about pieces of music, showing understanding, appreciation, respect and enjoyment as appropriate
- Be able to consider pieces of music in terms of meaning, mood, structure, place and time
- Understand that musicians use music to express emotions and experiences
- Understand that the work of musicians is influenced by their environment

## **Physical Education**

In Physical Education, children learn about healthy lifestyles and performing a range of movement activities.

- Know that the study of physical education is concerned with healthy lifestyles and performing a range of movement activities
- Know the principal rules of established sporting and athletic activities
- Know the principles of water safety
- Be able to perform with control, coordination, precision and consistency
- Be able to plan their own performance
- Be able to participate in small-side team games
- Be able to use tactics to improve their own performance and that of a team
- Be able to identify the features of a good performance
- Be able to evaluate their own performance
- Be able to refine and improve their performance based on their understanding of what is needed
- Be able to apply the rules and conventions of a range of sports and activities
- Be able to use movement as a means of expression and communication
- Be able to swim a distance of at least 100 metres
- Understand how physical activity affects the body
- Understand the importance of dressing appropriately for physical activity
- Understand the importance of hygiene
- Understand the importance of safety procedures

## **Drama**

The knowledge, skills and understanding which children gain through their study in literacy as well as the other subjects in IPC can be represented through drama.

- Be able to improvise a play, using roles, situation and elements of a story
- Be able to perform a scripted play
- Be able to make use of voice, language, posture, movement and facial expression
- Be able to make use of scenery, stage properties, costume and make-up
- Be able to evaluate their own performance and that of others
- Be able to respond to a performance identifying the key elements and devices

## **Technology**

In Technology, children learn about designing and making products to solve problems and meet needs.

- Know that technology affects people's lives
- Know how the lives of people in the host country are affected by the extent of technological advance
- Know how the lives of people in their home country are affected by the extent of technological advance
- Be able to respond to identified needs, wants and opportunities with informed designs and products
- Be able to gather and use information to suggest solutions to problems
- Be able to devise and use step-by-step plans
- Be able to consider the needs of users when designing and making
- Be able to select the most appropriate available tools and materials for a task
- Be able to work with a variety of tools and materials with some accuracy
- Be able to test and evaluate their own work and improve on it
- Be able to investigate the way in which simple products in everyday use are designed and made and how they work
- Be able to evaluate the effectiveness of simple products in everyday use
- Understand the need for accurate design and working
- Understand the ways in which technology can be used to meet needs, wants and opportunities
- Understand that different techniques, tools and materials are needed for different tasks
- Understand that the quality of a product depends on how well it is made and how well it meets its intended purpose

## **Personal Goals**

The Personal Goals are taught throughout the Primary phase: Milepost 1 – 3. Children are taught in such a way that they develop the personal qualities of:

### **Enquiry**

- Be able to ask and consider searching questions related to the area of study
- Be able to collect reliable evidence from their investigations
- Be able to use the evidence to draw sustainable conclusions

### **Adaptability**

- Be able to consider and respect the views, cultures and traditions of other people
- Be able to cope with unfamiliar situations
- Be able to approach tasks with confidence
- Be able to suggest and explore new roles, ideas, and strategies

### **Resilience**

- Be able to stick with a task until it is completed
- Be able to cope with the disappointment they face when they are not successful in their activities

### **Morality**

- Know about the moral issues associated with the subjects they study
- Know about and respect alternative moral standpoints
- Be able to explain reasons for their actions

### **Communication**

- Be able to make their meaning plain using appropriate verbal and non-verbal forms
- Be able to use a variety of tools and technologies to aid their communication
- Be able to communicate in more than one spoken language
- Be able to communicate in a range of different contexts and with a range of different audiences

### **Personal Goals continued**

#### **Thoughtfulness**

- Be able to consider and respect alternative points of view
- Be able to draw conclusions and develop their own reasoned point of view
- Be able to reflect on what they have learned and its implications for their own lives and the lives of other people
- Be able to identify their own strengths and weaknesses

#### **Cooperation**

- Understand that different people have different roles to play in groups
- Be able to adopt different roles dependent on the needs of the group and on the activity
- Be able to work alongside and in cooperation with others to undertake activities and achieve targets

#### **Respect**

- Know about the varying needs of other people, other living things and the environment
- Be able to show respect for the needs of other people, other living things and the environment
- Be able to act in accordance with the needs of other people, other living things and the environment

### **Society**

In Society, children learn about living as members of groups

- Know that the study of society is concerned with learning about living as members of groups
- Know about the major forms of national government, including those in the host country and their home country
- Know about significant international organisations
- Know about the major traditions, celebrations and ways of living in the host country and their home country
- Understand their own responsibilities in the groups to which they belong
- Understand the responsibilities of others in those groups and in the wider community
- Understand that the way in which people fulfil their responsibilities affects the lives of others
- Understand that the behaviour of individuals has an effect on the lives of others
- Be able to enquire into the nature of groups and social institutions and their effects on people's lives

### **International Goals**

International activities enable students to develop their international mindedness.

- Know about the key features related to the lives of people in their home country and, where appropriate, their parents' home countries
- Know about the key features related to the lives of people in the host country and/ or, where appropriate, other countries in which they have lived
- Know about ways in which the lives of people in the countries they have studied affect each other
- Know about similarities and differences between the lives of people in different countries
- Be able to explain how the lives of people in one country or group are affected by the activities of other countries or groups
- Be able to identify ways in which people work together for mutual benefit
- Understand that there is value both in the similarities and the differences between different countries

For more information about the IPC, please go to the IPC website: [www.internationalprimarycurriculum.com](http://www.internationalprimarycurriculum.com)