



Booker Park Curriculum

My Knowledge

The Booker Park curriculum is designed to be developmental. Teachers should choose learning intentions from the following pages which reflect individual children's next steps.

Contents

Pg.3 – Maths

Pg. 10 – Science

Pg. 13 – Computing

Pg. 15 – History

Pg. 16 – Geography

Maths

BookerParkStep4 (BP4)

Number:

To interact with number songs, showing anticipation of what will happen next, removing or adding objects (e.g. currant buns/ducks), copying adult models of holding up appropriate numbers of fingers, or joining in with counting/saying/signing number names/indicating numerals

To assist in activities involving 1:1 correspondence e.g. putting a cup on each saucer

To demonstrate an understanding of 'one' - holds up one finger, will only give one object from a group when asked for one, uses the word 'one' in everyday language

Measurement:

To fill and empty containers in play

To look for hidden objects

Geometry:

To match/group objects that are the same, regardless of colour/size e.g. all the cars, all the balls

BookerParkStep5 (BP5)

Number:

In play, to use number names and counting (in any order)

To distinguish between 'one' and 'lots'

To use 'one' and 'two' correctly when counting, beginning to recognise the numerals

To demonstrate an understanding of transaction - e.g. by exchanging one item for another, or a coin for an object in role play

Measurement:

To use the terms 'big' and 'small' (not always correctly)

Geometry:

To recognise and name at least 2 colours, match objects of the same known colour and begin to sort by colour

BookerParkStep6 (BP6)

Number:

To count up to three items, makes sets of up to three objects and recognises numerals 1,2,3 and use the numerals to label sets of up to 3 objects

To rote count to at least 5, pointing to each in turn and applying a single number-name to each

To request 'more' when there's not enough items for a 1:1 correspondence task, and recognises when there's too many and ceases activity

To recognise the group of 'more' objects when the difference is obvious

Measurement:

To understand and respond to the words big, large, small, little, identifying the big or small item from a choice of at least 2

To respond to the movement/directional terms stop, go, fast, slow, up, down

BookerParkStep7 (BP7)

Number:

To count up to five items, make sets of up to five objects and recognise numerals 1-5 and use the numerals to label sets of up to 5 objects

To recognise the set with 'more' objects in a variety of situations, and the set with 'less' when the difference is obvious

To count objects when asked 'how many?'

In practical and play situations, to add one object to a set when asked

Measurement:

To order at least three objects by size

Geometry:

To recognise a circle, triangle and square by name, matching shapes regardless of size/colour.

To recognise pictorial representations of known 2D shapes.

From a choice of two, where there is a marked difference, to identify long/short, heavy/light

BookerParkStep8 (BP8)

Number:

To count to at least 10, make sets of up to ten objects and recognise numerals 1-10 and use these to label sets of objects

To know 'one more' than any given number to 5

In practical and play situations, to take one object away when asked

To understand that the last number counted represents the total number in the count

To recognise the set which has more or less

To use 1st, 2nd, 3rd

Measurement:

To order at least 4 object by size/length

To begin to use the days of the week

Geometry:

To recognise and name triangles regardless of type

To identify shapes within pictures and in the environment.

To copy pictures made from shapes.

BookerParkStep9 (BP9)

Number:

To count to and back from 20, both rote counting, and to count sets of objects

To read and write and sequence numbers to 20, and use these to label sets of objects

To calculate with numbers 1-10 in practical and play based activities

To combine sets of objects, or remove objects from sets, counting to find out 'how many now?'

To know one more, and one less, of numbers to 10 without visual prompts

To demonstrate an understanding of the composition of number, and begin to be able to recall number bonds within 5

To demonstrate an understanding of commutative law and inverse relationships

To understand that teens numbers are made of a 'ten' and 'units'

To demonstrate an understanding of the symbols + - =

To combine sets of objects, or remove objects from sets, counting to find out 'how many now?'

To know some days of the week and months of the year, but not necessarily in order

To combine sets of objects, or remove objects from sets, counting to find out 'how many now?'

Measurement:

To know the name of some days of the week and months of the year, but not necessarily in order

To know the difference between day/night, morning/afternoon and be able to say things they do at the different times

Geometry:

To name all common colours

To begin to understand what a ruler, weighting scale and measuring jug are used for

To create repeating patterns with 2 or 3 variables

BookerParkStep10 (BP10)

Number:

To rote count forward and backwards from 0-100

To read and write numerals to 100

To identify one more/one less to 100

To know at least 4 of the pairs of numbers that add to make 10, and corresponding facts e.g. $6+4=10$, $4+6=10$, $10-4=6$

To know number bonds within 20

To solve one step addition and subtraction word problems within 20 (using practical resources)

To solve missing number problems within 10

To add and subtract 1-digit numbers to a 2-digit number (to 20)

To add and subtract two-digit numbers and ones (e.g. $23+5$, $57-4$) and two digit numbers and tens (e.g. $88-30$, $37-10$) where no regrouping is required, explaining their method verbally, in pictures, or using apparatus.

To solve one step multiplication problems using arrays (objects)

To know doubles and halves to 20

To solve one step division problems using objects and pictures mixed up

To recognise or find $\frac{1}{2}$ of objects, shapes and quantities

Measurement:

To name all days of the week and months of the year in order. Can match events to the day they take place.

To compare length, weight/mass, capacity/volume

To measure using non-standard units length, weight/mass, capacity/volume

To measure and record using standard units for length, weight/mass, capacity/volume

Geometry:

To name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids, spheres

BookerParkStep11 (BP11)

Number:

To count in twos, fives and tens forwards from 0

To count in twos, fives and tens backwards from 100

To count in twos, fives and tens forwards from any given number

To count in twos, fives and tens backwards from any given number

To compare and order numbers up to 100 using $<$ $>$ $=$ signs

To identify and estimate numbers on a number line

To add one and two digit numbers including ten using concrete objects and pictures

To add one and two digit numbers including ten mentally.

To use the inverse to check operations.

To subtract one and two digit numbers including ten using concrete objects and pictures.

To subtract one and two digit numbers including ten mentally

To find $\frac{1}{3}$ and $\frac{1}{4}$ of shapes, lengths, objects and quantities.

To find $\frac{2}{4}$ and $\frac{3}{4}$ of shapes, lengths, objects and quantities.

To solve complex missing number problems

To recognise equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

To count in fractions up to 10

To recall 2, 5 and 10 times table.

To recognise odd and even numbers to 1000

To solve problems involving all four operations

To derive addition and subtraction facts to 100

Measurement:

To estimate and measure length using cm and mm; and know $1\text{cm}=10\text{mm}$, $1\text{m} = 100\text{cm}$

To estimate and measure mass using g and kg; and know $1\text{ kg} = 1000\text{g}$

To estimate and measure capacity using l and ml; and know, $1\text{L} = 1000\text{ml}$

To solve simple problems involving length, volume and weight identifying suitable units of measurement

To identify and use a range of measuring equipment including scales and rulers and containers.

To use mathematical language to program a beebot including right angles in a half turn and three quarter turn

To tell and write the time quarter past and quarter to the hour including drawing the hands on a clock

To tell and write the time to five minutes including drawing the hands on a clock

To know minutes in an hour and hours in a day including am and pm

To compare and sequence time events and intervals including estimating how long a task will take

To combine coins to make a given amount and use signs £ and P

Geometry:

To identify and describe regular and irregular 2d shapes including quadrilaterals and polygons

To identify and describe 3d shapes including tetrahedron and polyhedron

To read scales in divisions of 1, 2, 5 & 10 in practical situations

To identify 2d shapes on the surface of 3d shapes

To identify line symmetry and right angles in 2d shapes

To identify rotation as a turn and turn in right angles

To describe position of an object on a map

To create and continue patterns using shapes including using a mirror to complete a symmetrical pattern

BookerParkStep12 (BP12)

Number:

To add and subtract fractions with the same denominator

To compare and order fractions

To show equivalent fractions

To count up and down in tenths

To know 3, 4 and 8 times tables

To multiply a two-digit number by a one-digit number using mental methods

To multiply a two-digit number by a one-digit number using written methods

To divide a two-digit number by a one-digit number using mental methods

To divide a two-digit number by a one-digit number using written methods

To add and subtract a three-digit number and ones mentally

To add and subtract a three-digit number and tens mentally

To add and subtract a three-digit number and hundreds mentally

To add and subtract three digit numbers using column methods

To estimate calculations

To use inverse to check

To solve addition, subtraction, multiplication and division word problems

To read and write numbers to 1000 in numerals and words

To compare and order numbers to 1000

To know place value of each digit in a three-digit number

To count in 4, 8, 50 and 100

Measurement:

To compare durations of events

To identify parallel lines

To add length, mass and volume

To subtract length, mass and volume

To find perimeter of simple 2D shapes

To use roman numerals from I to XII to tell the time

To use 12 and 24 hour clocks

To add and subtract money

To estimate time

To read time to the nearest minute

To know there are 60 seconds in a minute

To know how many days in each month, year and leap year

To measure and compare lengths (mm/cm/m), mass (kg/g) and volume (l/ml)

To identify angles smaller than a right angle using acute

To know there are 90 degrees in a right angle

To identify angles larger than a right angle using term obtuse

Geometry:

To draw 2D shapes

To make 3D shapes using modelling materials

To identify horizontal and vertical lines

To identify perpendicular lines

Science

Booker Park Steps 4 & 5 (BP4/6)

- To repeat actions that have an affect
- To explore materials with different properties
- To explore natural materials, indoors and outdoors
- To explore and respond to different natural phenomena

Booker Park Steps 6 & 7 (BP6/7)

- To use all their senses in hands-on exploration of natural materials
- To explore collections of materials with similar and/or different properties
- To talk about what they observe
- To plant seeds and care for growing plants
- To understand the key features of the life cycle of a plant and an animal
- To begin to understand the need to respect and care for the natural environment and all living things
- To explore and talk about different forces they can feel
- To talk about the differences between materials and changes they observe

Booker Park Steps 8 & 9 (BP8/9)

- To describe what they see/hear/feel while outside
- To understand the effect of the changing seasons on the natural world around them

Booker Park Step 10 (BP10)

Working Scientifically:

- To ask simple questions and recognise they can be answered in different ways
- To observe closely, using simple equipment
- To perform simple tests
- To identify and classify
- To use observations and ideas to suggest answers to questions
- To gather and record data to help in answering questions

Plants:

- To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- To identify and describe the basic structure of a variety of common flowering plants, including trees (e.g. leaves, flower, bulb, trunk, stem etc.)

Animals including humans:

To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals

To identify and name a variety of common animals that are carnivores, herbivores and omnivores

To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds, mammals, including pets)

To identify, name, draw and label the basic parts of the human body and say which part is associated with which sense

Everyday materials:

To distinguish between an object, and the material it is made from

To identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock

To describe the simple physical properties of a variety of everyday materials

To compare and group together a variety of everyday materials on the basis of their simple physical properties

Seasonal Change:

To observe changes across all four seasons

To observe and describe weather associated with the seasons and how day length varies

Booker Park Step 11 (BP11)

Working Scientifically:

To ask simple questions and recognise they can be answered in different ways

To observe closely, using simple equipment

To perform simple tests

To identify and classify

To use observations and ideas to suggest answers to questions

To gather and record data to help in answering questions

Living things and their habitats:

To explore and compare the differences between things which are living, dead and things that have never been alive

To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

To identify and name a variety of plants and animals in their habitats, including micro-habitats

To describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

Plants:

To observe and describe how seeds and bulbs grow into mature plants

To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Animals, including humans:

To notice that animals, including humans, have offspring which grow into adults

To find out and describe the basic needs of animals, including humans, for survival (water, food, air)

To describe the important for humans of exercise, eating the right amounts of different types of food, and hygiene

Use of everyday materials:

To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

To find out how the shapes of solid objects can be changed by squashing, bending, twisting and stretching

Computing

Booker Park Steps 4 & 5 (BP4/5)

To recognise different digital devices e.g. computer

Booker Park Steps 6 & 7 (BP6/7)

What is a computer:

To access content using an appropriate device

To recognise different digital devices e.g. computer, phone, tablet, camera

To recognise that different devices are used for different purposes

To choose appropriate technology from a limited selection to fulfil a familiar task

Communication – multimedia:

To create simple digital content e.g. digital art

To operate a digital device with support to fulfil a task e.g. take a photo

To know that you can control multimedia content e.g. play/stop/pause videos, alter volume

To choose media from a selection for a given purpose

Communication – data:

To sort familiar objects into 2 categories

To count up to 3 objects represented in a digital resource

Programming and algorithms

To control technology for a purpose e.g. to move a remote control car

To recognise the success and failure of an action when using technology

To follow an instruction to control a device

Online safety and digital literacy:

To choose content to watch or listen to on a familiar webpage

To know that some online content is inappropriate

To know that some information is private

Booker Park Steps 8 & 9 (BP8/9)

What is a computer:

To identify and use the mouse, keyboard and screen

To identify the space bar, letters and numbers on a keyboard

To know that content is stored on a digital device e.g. ask to see the photo taken on a camera/tablet

Communication – multimedia:

To select basic options on a familiar app to change appearance of content e.g. font size/colour

To choose the correct device to complete a specific task

To present information using appropriate software with support

Communication – data:

To identify text, image, video and audio content

To collect simple data on a topic

To present simple data using images

Programming and algorithms

To try alternative approaches to achieve a goal when using technology

To input a short sequence of instructions to control a device (e.g. beebot)

To recognise that we control computers by giving them instructions

To order two or three steps of a familiar task

Online safety and digital literacy

To recognise inappropriate content and know how to tell an appropriate adult

To describe what makes a good friend

To know that some information is private and we shouldn't share it with everyone

Booker Park Steps 10/11

Multimedia:

To use technology to create, organise, store manipulate and retrieve digital content

To recognise common uses of information technology beyond school

Programming and algorithms

To understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions

To create and debug simple programs

To use logical reasoning to predict the behaviour of simple programs

Online safety and digital literacy:

To use technology safely and respectfully, keeping personal information private, identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

History

Booker Park Steps 4 & 5 (BP4/5)

To show awareness of the passing of time over the course of the day e.g. anticipate sessions that are yet to come

To show awareness of routine events that happen on specific days (with contextual clues) e.g. swimming

To recognise that they grow older e.g. that they have birthdays, that they were once babies

Booker Park Steps 6 & 7 (BP6/7)

To begin to make sense of their own life-story and family's history

To show an interest in different occupations

Booker Park Steps 8 & 9 (BP8/9)

To comment on images of familiar situations in the past

Booker Park Steps 10/11 (BP10/11)

To develop an awareness of the past, using common words and phrases relating to the passing of time

To understand some of the ways we find out about the past and identify different ways in which it is represented

To know about changes in living memory. Where appropriate these should be used to reveal aspects of change in national life.

To know about events beyond living memory that are significant nationally or globally

To know about the lives of significant individuals in the past who have contributed to national and international achievements.

To know about significant historical events, people, and places in their own locality.

Geography

Booker Park Steps 4 & 5 (BP4/5)

To demonstrate awareness of different environments within the school, and what they do there e.g. lunch in the hall, PE on the MUGA etc.

To transition with support to different parts of the school building, showing an increasing independence about route

Booker Park Steps 6 & 7 (BP6/7)

To know there are different countries in the world and talk about the differences they have experienced or seen in photos

To differentiate between school, home and other familiar environments – recognise similarities and differences

Booker Park Steps 8 & 9 (BP8/9)

To draw information from a simple map

Recognise some similarities and differences between life in this country and life in other countries

Recognise that some environments are different to the one in which they live

Booker Park Steps 10/11

Locational Knowledge:

To name and locate the world's seven continents and five oceans

To name, locate and identify characteristics of the four countries and capital cities of the United Kingdom, and its surrounding seas

Place Knowledge:

To understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and a small area in a contrasting non-European Country

Human and physical geography:

To identify seasonal and daily weather patterns in the United Kingdom and the location of hot/cold areas of the world in relation to the Equator and the North and South Poles.

To use basic geographical vocabulary to refer to:

- Key physical features including, beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
- Key human features including city, town, village, factory, farm, house, office, port, harbour, shop

Geographical skill and fieldwork

To use world maps, atlases and globes to identify the United Kingdom and its countries, as well as other countries, continents and oceans studied at this stage

To use simple compass directions (North, South, East, West) and locational and directional language (e.g. near/far, left/right) to describe the location of features and routes on a map

To use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features, devise a simple map, and use and construct basic symbols in a key

To use simple fieldwork and observational skills to study the geography of the school and its grounds, and the key human and physical features of its surrounding environment.