

Welcome to our

KS1 Science Information Meeting

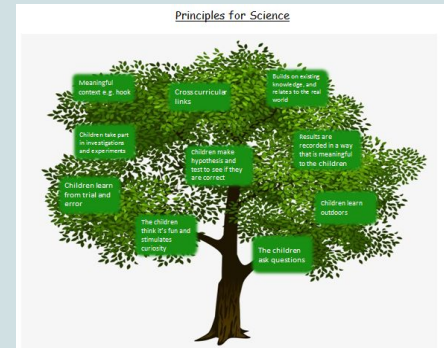
Wednesday 22nd March 2023



Aims

- Explain how science is taught in KS1 at Burlington Infant and Nursery School
- Our curriculum
- Engaging children and how we learn
- Increase confidence and understanding in supporting your child at home.
- Can you help us?

The slides will be shared on our website after the meeting



Awards



Primary Science Quality Mark

- The school received this award in 2019, in recognition of the improving provision, practice and performance in respect of the teaching and learning in Science across the school.
- It is re-assessed every 3 years and we are currently taking part in the programme to be re-assessed.

Vision Statement for Science







At Burlington Infant and Nursery School, we ensure science learning is **fun, challenging and intriguing, stimulating children's curiosity and creating meaningful experiences. Building on children's existing knowledge and experience** helps science to feel relevant and accessible on their level. This gives them the appetite and **confidence to explore** and discover the world around them through a scientific lens. Science is integrated into the curriculum at every opportunity so children appreciate the **interrelationship between science and other disciplines. Hands on exploration both inside and outside the classroom** cements their understanding of important scientific concepts. Children are taught how to **apply a scientific method** to their investigations - including investigate, hypothesis, test, record, and conclude - which sets up a good foundation and **vocabulary** to build their science learning further. We want to awaken in our children a passion for science and its limitless possibilities. By giving them the confidence to **ask questions, take risks and reflect** on what they discover we hope we are planting a seed that will last a lifetime.

Principles for Science



- Written 3 years ago and reviewed annually
- Staff, governors, parents, children were asked - What makes Science amazing at Burlington?
- Displayed on our website, in classrooms and used during lesson observations




Plants	Year 1	Year 2
<p data-bbox="170 161 614 205">What will my child learn?</p> <div data-bbox="106 216 278 394">  </div> <div data-bbox="353 216 591 394">  </div> <div data-bbox="170 401 388 547">  </div> <div data-bbox="432 401 651 565">  </div>	<p data-bbox="678 161 1155 314">Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p data-bbox="678 358 1155 511">Identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p data-bbox="1188 161 1593 276">Observe and describe how seeds and bulbs grow into mature plants.</p> <p data-bbox="1188 319 1638 472">Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>
<p data-bbox="170 590 434 634">Key vocabulary</p>	<p data-bbox="678 590 1141 705">leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud</p> <p data-bbox="678 749 1093 814">Names of trees in the local area</p> <p data-bbox="678 858 1097 967">Names of garden and wild flowering plants in the local area</p>	<p data-bbox="1188 590 1619 743">light, shade, sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling</p>

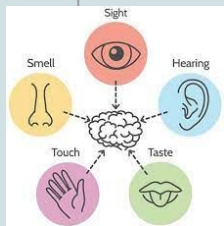
Animals, including humans

Year 1

Year 2

What will my child learn?

Herbivore	Carnivore	Omnivore
Animals that eat plants.	Animals that eat meat.	Animals that eat both plants and meat.
		



Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.

Identify and name a variety of common animals that are carnivores, herbivores and omnivores.

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

Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Notice that animals, including humans, have offspring which grow into adults.

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).

Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.



Key vocabulary

head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group, parts of the body including those within the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ear, tongue

offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/hen, kitten/cat, caterpillar/butterfly), survive, survival, water food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)

Materials

Year 1 - Everyday Materials

Year 2 - Uses of everyday materials

What will my child learn?

Distinguish between an object and the material from which it is made.

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

Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Describe the simple physical properties of a variety of everyday materials.

Compare and group together a variety of everyday materials on the basis of their simple physical properties.

object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through

Names of materials - wood, metal, plastic, glass, brick, rock, paper, cardboard

Properties of materials - as for Year 1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid

shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching



Squashing, Bending, Twisting and Stretching



Squash an object by pushing both hands together.



Bend an object by grabbing both ends of the object and bringing the ends towards together.



Twist an object by turning your hands in opposite directions.



Stretch an object by pulling your hands slowly and gently apart.

Key vocabulary

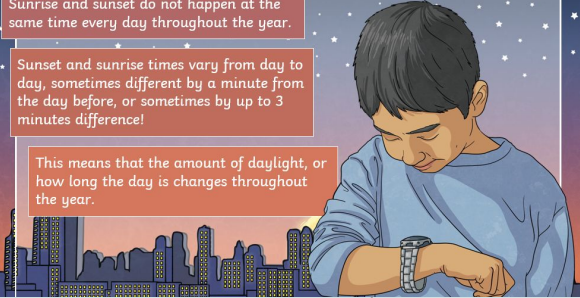
<p>Seasonal changes</p>	<p>Year 1</p>	
<p>What will my child learn?</p> 	<p>Observe changes across the four seasons.</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p>	
<p>Key vocabulary</p>	<p>weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, sun, sunrise, sunset, day length</p>	

What is sunrise and sunset?

Sunrise and sunset do not happen at the same time every day throughout the year.

Sunset and sunrise times vary from day to day, sometimes different by a minute from the day before, or sometimes by up to 3 minutes difference!

This means that the amount of daylight, or how long the day is changes throughout the year.



Living things and their habitats

Year 2

What will my child learn?

Explore and compare the differences between things that are living, dead, and things that have never been alive.

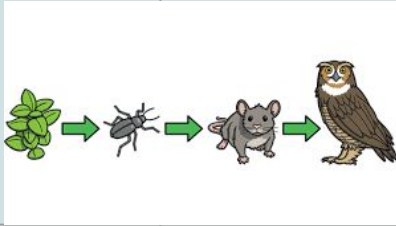
Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

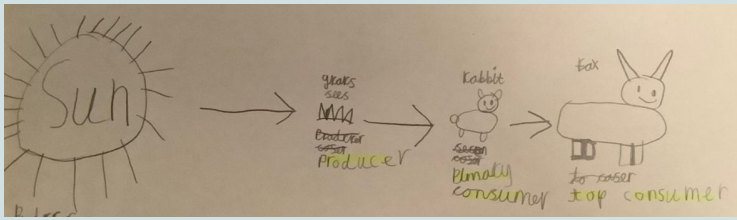
Identify and name a variety of plants and animals in their habitats, including micro-habitats

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

Key vocabulary

living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied





How will my child learn? What does a science lesson look like?

Science flashback

Prior learning links, hook, introduce new knowledge/skill

Key vocabulary

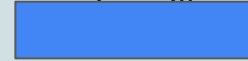
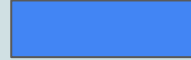
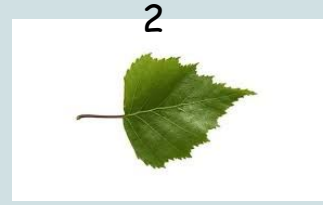
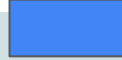
Activity/Task/Investigation

Plenary



Science Flashback!

Which leaf comes from an oak tree?



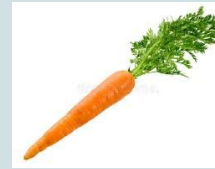
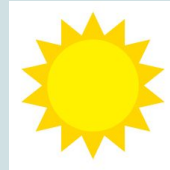
Name this animal. Can you also name its habitat?



What do we call a baby sheep?



Draw a food chain.



Which one of these materials is the stretchiest?



wood



rubber



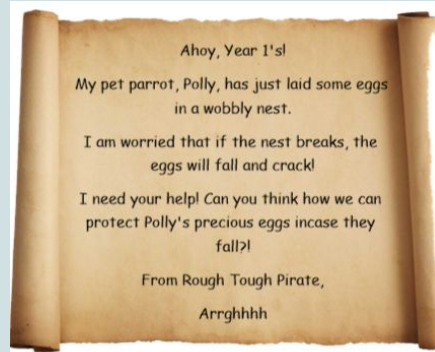
plastic

Prior learning links, hook, introduce new knowledge/skill



WHAT'S GOING ON?

Hungry snails



Ahoy, Year 1's!

My pet parrot, Polly, has just laid some eggs
in a wobbly nest.

I am worried that if the nest breaks, the
eggs will fall and crack!

I need your help! Can you think how we can
protect Polly's precious eggs incase they
fall?!

From Rough Tough Pirate,

Arrghhhh



Year 2 need our help.

They have made bird
feeders.

How many do they need to make?

They want to know which
birds it is attracting

Can you be an Ornithologist?



ODD ONE OUT

Three Seasons



Last week in Science we collected weather data.

Each day we measured the temperature, wind,
rainfall and looked at the weather.

Today we are becoming weather presenters!



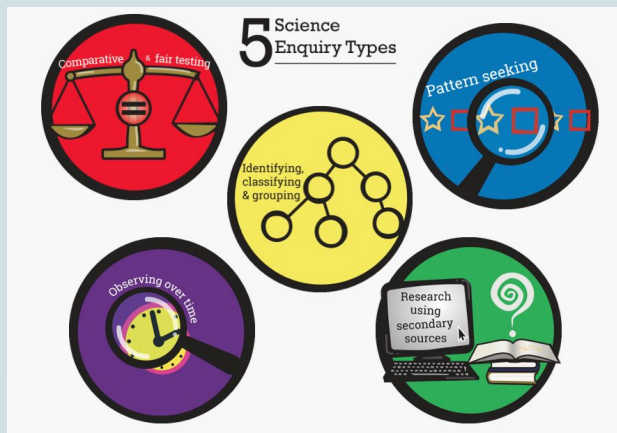
Vocabulary Recap



Remember
M movement
R respiration
S sensing

N nutrition
E excrete
R reproduce
G grow

Activity/Task/Investigation



Can I name common birds ?

Can I record my results in a week ?



	day 1	day 2	day 3

Report back to year 2 -
How many birds did we see!



Plenary

In talk partners can you compare 2 materials?


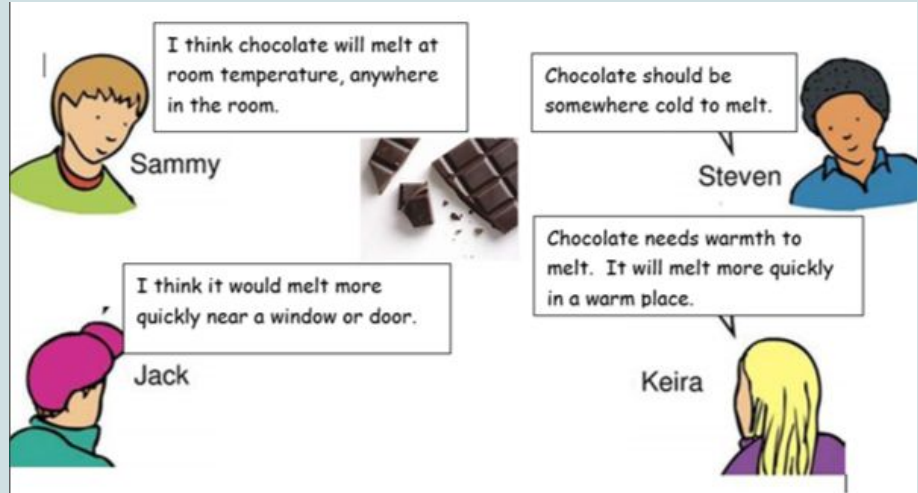


table chair desk
cupboard bookcase school bag
pencil eraser sharpener ruler

but



I think chocolate will melt at room temperature, anywhere in the room.

Sammy

Chocolate should be somewhere cold to melt.

Steven

Chocolate needs warmth to melt. It will melt more quickly in a warm place.

Keira

I think it would melt more quickly near a window or door.

Jack

Is fire living, dead or never been alive



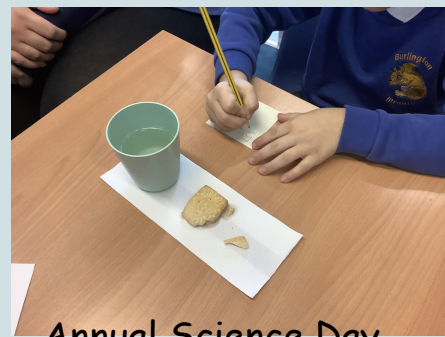
Who is correct? Why?

Who is incorrect? Why?

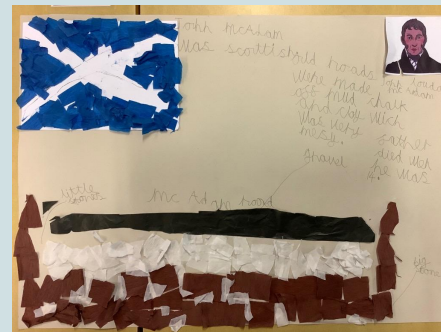
**SCIENCE
MUSEUM**



Wider Opportunities In Science



Annual Science Day



Scientists



Beverley Park



Visitors

Can you help us?

Do you have a science background?

Do you work in a field of science?

Do you know someone who does?

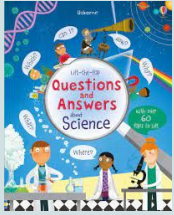


We would love to build some links with parents to further our possibilities driver and give children context for their learning. If you have a background in any field of Science and would be willing to talk to one of our year groups about what a job in Science entails please email the school office or write it on the feedback sheet.

What can you do at home to help?

- Read on the year group overview what your child will be learning in science that week and discuss it with your child
- Take part in the half termly science homework
- Take part in science experiments - take photos and we can share them in our newsletter and website
- Visit science related places - take photos and we can share them in our newsletter and website
- Talk about the seasons with your child, discuss the changes that they notice
- Read science related books
- Look out for science related activities in the newsletter, Tapestry and on our website

<https://www.burlingtoni.kingston.sch.uk/teaching-and-learning/science>



Year 2 **This week we are learning** **Burlington**

Maths - Comparison and Order
We will be learning about the different ways to describe the order of objects by different points on a line.
Equilibriality (clockwise, anti-clockwise, full turn, half turn, quarter turn, three quarter turn)

English
We will be using our senses to test a range of different objects and describe the properties of different objects. We will then produce a list of objects. We will then produce a list of objects. We will then produce a list of objects.

Spelling
Adding an initial to the end of a word to make a new word.

Golden Words
Read and write the words in the box.

Handwriting
Tracing with a dot.

Topic
We will be exploring how we know about the world around us. We will be exploring how we know about the world around us. We will be exploring how we know about the world around us.

Science
We will be exploring how we know about the world around us. We will be exploring how we know about the world around us. We will be exploring how we know about the world around us.

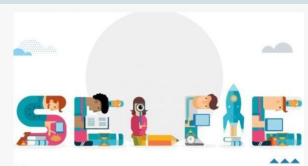
Disorderly
We will be learning to describe the order of objects by different points on a line.

Computing
We will be learning to describe the order of objects by different points on a line.

Maths
We will be learning to describe the order of objects by different points on a line.

Geography
We will be learning to describe the order of objects by different points on a line.

Art
We will be learning to describe the order of objects by different points on a line.



Science Selfie
Please email your science selfie to admin@burlingtoni.kingston.sch.uk and please let me know if you would allow it to be shared in the school newsletter and on our school website.
We look forward to seeing your Science Selfie!

Science Outside the Classroom

In your Garden or at the Park

Carry out a bird watch
Go on a minibeast hunt
Make a Bug Hotel
Plant seeds and bulbs
Identify trees

In your House

Go on a materials hunt

Experiments to try

<https://www.natgeokids.com/uk/>

This child-friendly website is great to teach and inspire children and is filled with fun and unique activities - like How to Make a Paper Bowl Jellyfish!

<https://www.servicesforeducation.co.uk/blog/advice-for-parents/5-experiments/>

5 Science Experiments You Can Do At Home

<https://www.burlingtoni.kingston.sch.uk/teaching-and-learning/science> Look out for science related activities in the newsletter, Tapestry and website

Places to Visit

Wisley, Woking, Surrey, GU23 6QB

Science Museum, Exhibition Road, London, SW7 2DD (free entry)

Sea Life London Aquarium, County Hall, Westminster Bridge Road, London, SE1 7PB

Wetlands Centre London, Queen Elizabeth Walk, Barnes, London, SW13 9WT

Horniman Museum & Gardens, 100 London Road, Forest Hill, London, SE23 3PQ

The Look Out Discovery Centre, Nine Mile Ride, Bracknell, RG12 7QW

Please complete the science information feedback form and take the handouts!

