Haringey Education Partnership - Primary Science curriculum

Summary of National curriculum for science at key stage 1 and 2:

KEY STAGE 1:
The principal focus of Science teaching in Key Stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information.
They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.
'Working scientifically' is described separately in the programme of study, but must always be taught through and clearly related to the teaching of substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.
Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

KEY STAGE 2 Lower Key Stage 2 – Years 3 & 4:
The principal focus of Science teaching in lower Key Stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information.
They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Biology	Chemistry	Physics	Biology	Physics	Biology
Year 1	Animals including Humans Identify and name a variety of common animals (carnivores, herbivores and omnivores) Describe and compare the structure of a variety of common animals Draw and label the basic parts of the human body	Materials Identify and name a variety of everyday materials Properties of materials		Plants Identify plants and trees Describe the structure of common flowering plants		Seasonal Change Observe changes across the 4 seasons Observe and describe weather in different seasons changes in day length **Linked to changes in trees in Plants.**
Year 2	Animals including Humans Animals and their young What animals including humans need to survive and be healthy	Materials Compare the suitability of different materials, particular uses. Changing the shape solid objects	Plants Observe and describe how seeds and bulbs grow into mature plants Find out what plants need to grow		Living Things Living and dead, and things that have never been alive How animals and plants live in their habitats Identify and name a variety of plants and animals in their habitats How animals get food (including food chains)	
Year 3	Animals including Humans Nutrition, muscular skeletal system for support, movement, and protection	Light Light sources, How light is reflected off objects, how shadows form, changing shadows, eye protection	Rocks Comparing different rocks, fossils, soil formation	Plants Parts of plants, needs of plants and their life cycle.	Forces Non-contact forces, attraction and repulsion of magnets, magnetic materials and the N and S pole of magnets	**Bee project** A look at the relationship between bees and their environment; importance in pollination, food, light and earth's magnetic field
Year 4	Animals including Humans Eating, teeth, digestive	States of Matter Group materials	**Electricity (P1, P2)** Appliances, building	**Electricity (C2)** Appliances,	Sound Making sounds,	Living Things classification,

	system and food chains, producers, predators and prey.	based on their properties, changes of state, heating and cooling, the water cycle	circuits and identifying components, circuit diagnostics, conductors and insulators	building circuits and identifying components, circuit diagnostics, conductors and insulators	vibrations, the ear, changes in pitch and volume	characteristics, and the effects of environmental changes
Year 5	Animals including Humans Life cycles, plant and animal reproduction, human life cycle	Materials Classifying materials, Dissolving, separating and changes of state, uses of materials, reversible and irreversible changes		Earth and Space The movement of Earth, other planets and the Moon in relation to the Sun and each other, spherical bodies, night and day	Forces Gravity, air resistance, water resistance and friction between moving surfaces, multiplying forces using levers, pulleys and gears	Living Things Classifying living things, Life cycles of mammals, amphibians, insects and birds
Year 6	Animals including Humans The circulatory system, lifestyle, health and disease; transport of water in animals	Light How light travels, how we see objects, the shape of shadows	Electricity The effects of changing the number and voltage of cells in a circuit; varying the function of components; representing circuits using symbols	Evolution What we learn by looking at fossils; variation, reproduction and adaptation. Evolution		Living Things Classifying microorganism, plants and animals