

### Progression in use of Scientific Equipment- 24/25

This document is intended to give a medium-term overview of use of scientific equipment in science lessons. The content is mapped and organised into Year groups but is cumulative throughout the primary years.

It indicates when children should be introduced to using particular equipment. The intention is that children are able to use equipment linked to their age range accurately.

<b>Use of scientific equipment – Progression over time – this is cumulative through the primary school journey and not restricted to stated year groups only.</b>	
<b>Early Years/ Foundation</b>	<b>Suggestions of equipment to have in play areas for the children to explore (not use accurately).</b> Magnifying glass, stopwatch, torches, funnels, measuring cylinders, mirrors, insect catchers, nets, trowels, watering cans, gloves, measuring spoons, sieves, colanders, rulers, tape measures, scales, weights, tweezers, magnetic wands
<b>Year 1</b>	Rulers, metre sticks, scales, weights, tweezers, gloves, specimen pots, sandpaper, rubber, trowels, pots, seeds, compost, planting materials, measuring cylinders, beakers, mirrors, magnifying glasses, nets, insect catchers,
<b>Year 2</b>	Pipettes, measuring cylinders (with scales), trundle wheel, begin to use apps that measure light, sound and temperature, life cycle cards, measure their own pulse (by counting), food chain cards, forces ramps.
<b>Year 3</b>	Human skeleton and skeletons of other common animals, force meters/ newton metres, horseshoe magnets, magnetic wands, bar magnets, iron fillings, a range of metals, ball magnets, ring magnets, torches, LEDs, sundial, range of soil types, different types of rocks especially granite and limestone, fossils, funnels, filter paper, syringes,
<b>Year 4</b>	Thermometers, measuring cylinders (a range of scales), various sizes of beaker, microscope, stopwatches, model of the mouth (teeth), data loggers to measure pitch, volume and temperature, tuning fork, food web, classification keys, model of the ear, ice, candles, kettles (supervised). Electrical equipment: batteries, bulbs, buzzers, wires, switches, conductors/insulators
<b>Year 5</b>	Telescope, model of the solar system, moon phases chart, specimen pots, petri dishes, microscopes, human life cycles (and changes in puberty) height and weight charts, model parachutes, friction on a range of surfaces e.g. carpet, wood, vinyl, model of a flowering plant, bicarbonate of soda and vinegar.
<b>Year 6</b>	Model of the heart, stethoscope, scalpel, accurately measure a pulse rate (stopwatch or similar), parallel circuits, multi-meter/ammeter, electrical circuit diagrams, identify animals from fossil remains, trace ancestry and evolution over time, predict inheritance based on probabilities, identify hybrids.

**Please note: by Upper KS2, most children should be encouraged to select their own equipment to carry out an investigation correctly.**