## What does Science look like at St. Luke's?

## This is our philosophy:

- Enquiry led lessons
- Disciplinary skills and substantive knowledge taught
- Building children's curiosity about the world through the 3 stands of Science
- Cross-curricular links wherever possible

## What a Science lesson looks like in our school:

- Mixed ability groupings / seating which allows children to work with different people over the course of time.
- Science readily accessible through continuous provision in EYFS/Y1.
- Lots of talk about Science work to deepen understanding of science concepts
- Wider thinking- how does what we learn apply to outside of school (wider world)
- Mini plenaries to share misconceptions, pose questions, challenge ideas
- Access to resources in practical lessons
- Use of science skill shapes and enquiry type shapes

St Luke's science shapes for working scientifically











Different science enquiry types within our lesson











### How does it work?

- We follow the PLAN planning resource documents to help break Science down into each year group and each half term
- Focus on Science language in all lessons which can be seen assessed before and after units through questioning or end of unit projects
- Many opportunities to talk as Scientists
- TA's sometimes used to pre-teach a concept ahead of the lesson and to consolidate learning after a lesson.
- Recap activities to help combat the forgetting curve throughout the children's primary experience

#### This is what we do:

- Staff are able to plan to suit themselves. We don't use a fixed planning pro forma and
  encourage teachers to plan for the needs of their own class following the Science overview
  set out for them
- Positive use of mistakes/misconceptions that are identified during live marking.
- Regular book scrutiny, learning walks & pupil voice.
- Whole school PD
- Raised profile of Science- Science day/week and trips

## This is what you might typically see:

- Enquiry led lessons to allow children to explore the answer/s
- Both practical tasks (disciplinary) and substantive (knowledge) based lessons
- Paired/group work
- Active Science- using the orienteering course to answer science questions
- Engagement and perseverance
- Children being challenged in their learning- next step questioning
- Learning being displayed on working walls in the classroom

# This is how we know how well our pupils are doing:

- Internal tracking following our assessment criteria
- End of unit assessments/projects
- Pupil progress meetings
- Teacher assessment/targets
- Marking and feedback
- Photo evidence of practical science work
- Targeted use of TAs working with different groups of children and delivering daily intervention, which is reported back to the class teacher.

## This is the impact of the teaching:

- An in-depth substantive knowledge of the primary science curriculum
- The ability to work as scientist using our science skills
- A rich vocabulary to help children move forward in their science learning
- Determination and high aspirations to succeed in Science- allowing their lights to shine
- A love for Science as a subject and a desire to learn more!

## **Science Books**

- Date and WALT (underlined with a ruler)
- Underlined subheadings
- Use of shapes both skills and enquiry stuck into books to emphasise how the children are working as Scientists
- Start and end of unit assessments/projects
- Key vocabulary throughout all lessons