

'We Are Scientists' at Grove Road

Stem Sentences

Wonder and ask

Exciting 'way in' to a Science lesson.
Child-led enquiry.
Capture the children's curiosity.

Discover and investigate

Children discover and learn about today's learning point. Investigations and practical experiments are often carried out here.

Explain and describe

Children reflect upon and record their scientific findings.
Encourage children to draw conclusions and recognise relationships.

I can see _____.
I think _____ because _____.
I wonder _____.
Why/how/what/where _____?

I predict _____ because _____.
I expect to see _____ because _____.
We want to test _____ to find out if _____.
To find out _____ we could _____.
If we change _____ then _____.
It is a fair test because _____.
The _____ variable is _____.

My results show _____.
I found out that _____.
I was surprised when _____ because _____.
The similarities/differences between _____ and _____ are _____.
Based on _____ I can conclude / predict that _____.
The pattern I noticed is _____.
I made a marvellous mistake when _____ because _____.

Metacognition: Reflect

Beginning of lesson: establish confidence and prior knowledge.
During investigation: Is everything going to plan? Does anything need to change?
End of lesson: Has your colour changed? What helped us to succeed?
Science books - tag out of a lesson to show confidence (KS2).

Object / picture / video.
I see, I think, I wonder.
Explorify: Odd One Out, Zoom In Zoom Out, What's Going On?
Concept cartoon: provide children with a purpose for investigating.
Can you prove them right / wrong?
Explore the curiosity cube.
Consider an imaginative / real life question or problem.
What other questions do the children have? What would they like to find out?

Key scientific questions are answered through a learning activity / practical investigation.
Kagan structures support cooperative discovery and discussion.
Key scientific vocabulary is explored and displayed as it arises.
Enquiry type is identified using enquiry superheroes.
Identify and address children's misconceptions.
Provide opportunities for children to plan investigations.

Lots of opportunities for talk using STEM sentences and scientific vocabulary.
Discussing and learning from marvellous mistakes.
Teacher modelling.
Opportunities are created for children to record scientific findings, using graphs and scientific write-ups.
Seesaw is used to capture children's discoveries and reflections.

The learning environment - Passion for Science is clear!

Working Wall: Displayed as a journey and added to each week (a progression of learning).

Children's questions, predictions, key vocabulary, stem sentences, variables, enquiry superheroes, marvellous mistakes, a celebration of findings.

Curiosity Cube relating to current topic.

Assessment: Question, observe, Seesaw.

Knowledge: End of unit quiz.

Working Scientifically: TAPS Assessment.