

Anchor Charts

Science & Engineering Practices











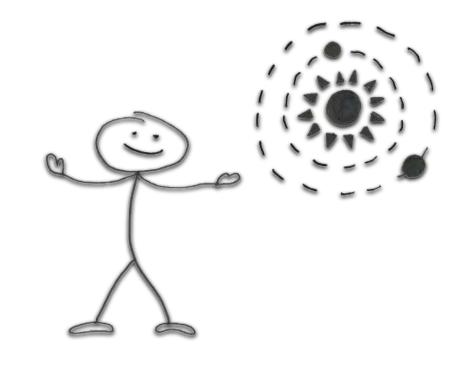
Asking Questions & Defining Problems

This means wondering about something and wanting to find out more. Scientists ask questions to help them learn new things.



Developing & Using Models

This means creating something that shows how something else works. Scientists use models to help them understand things that are too big, too small, or too complex to see.



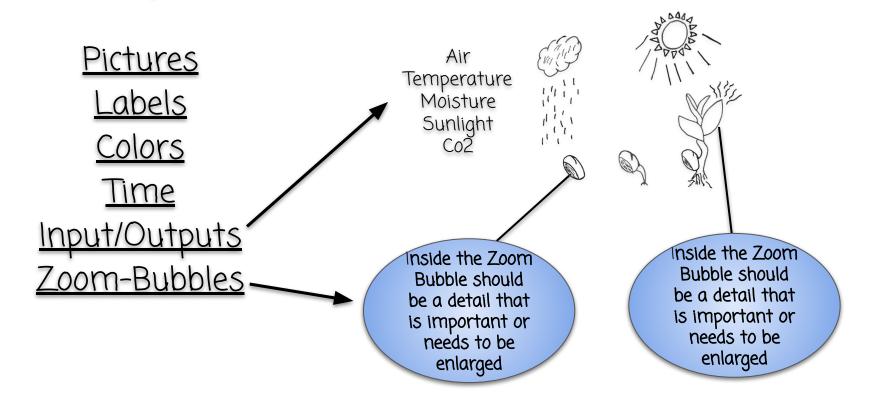
Elements of a Scientific Model

Explanations

You should be able to tell about your model in detail, making it clear to someone.



How, Why and What if questions require details.



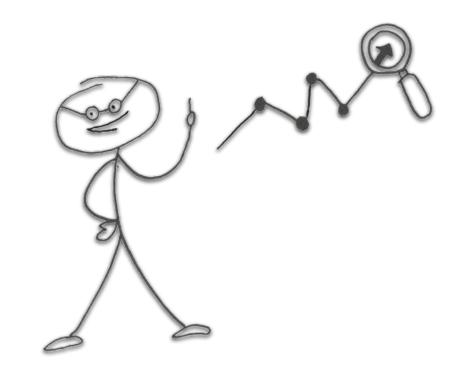
Planning and Carrying Out Investigations

This means planning and doing experiments to answer questions. Scientists use investigations to learn more about how things work



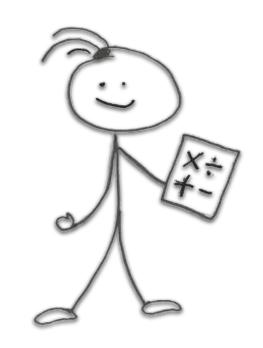
Analyzing and Interpreting Data

This means looking at the information collected during investigations and trying to make sense of it. Scientists use data to help them understand what is happening.



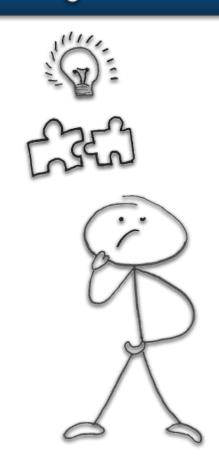
Using Mathematics & Computational Thinking

This means using numbers and digital tools to help solve problems. Scientists use math to help them understand the world around them.



Constructing Explanations & Design Solutions

This means using what we know to explain something we observe. Scientists use explanations to help them understand why things happen.



Engaging in Argument from Evidence

This means using facts and evidence to explain why we think something is true. Scientists use arguments to help them convince others that their ideas are correct.



Obtaining, Evaluating, & Communicating Information

This means finding out new things and sharing what we have learned. Scientists share their findings with others to help them learn and understand more about the world.

