

Scaffolding Activities
Bloom's Taxonomy and Hess's Depth of Knowledge

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Project Title: Science Practices in First Grade

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Objectives:

- Discuss and identify different types of scientists
- Label and draw a picture of themselves as particular scientist
- Ask questions and use "I wonder" statements
- Define a simple problem that can be solved through an investigation
- Label a life cycle model
- Compare and contrast different life cycles
- Explain what data means
- Compare and contrast the strength and weakness of the data
- Use accountable talk stems to engage in conversation with peers
- Apply learned scientific and engineering skills to solve a problem

Essential Question(s):

- What do scientists do?
- How do questions help us solve our problem?
- How do models help us?
- How can we use data to explain our ideas?
- How can we share our information with our peers?

Unit/Project Question(s):

How can we be scientists?

How can we make a plan to solve our problems?

What can we learn from our results?

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Content Questions:

Identify different types of scientist and scientific fields

Draw a scientist in the correct environment

Define problems

Ask questions about problems with the use of "I wonder" statements

Label a life cycle

Compare and contrast different life cycles

Analyze and interpret data

Discuss data results with peers using evidence to justify reasoning

Apply scientific practices to solve a real life problem

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Bloom's Level	Activities	Assessment	Hess's Depth of Knowledge
Creating	Collaborate with peers to convince what tree should be planted at our school	Performance Task Rubric	Extended Thinking
Evaluating	Predict leaf collection results Justify reasoning of results using evidence of data collection	Participation rubric	
Analyzing	Compare and contrast different life cycles	Participation rubric Life cycle game (Sheppard's software)	Strategic Thinking
Applying	Sketch/Draw picture of themselves as a specific scientist in a field	Teacher observation of student work	Skills & Concepts
Understanding	Ask questions using "I wonder" statements	Participation rubric Brain Pop Jr. quiz	Recall & Reproduction
Remembering	Label parts of a life cycle Define a problem	Life cycle game	