

Science Concepts and Activities

Science Concepts	Apply to Book	Your Storytime
<p><u>Content</u></p> <ul style="list-style-type: none"> • Life science—knowing about living things and their characteristics, including plant and animal kingdoms and human bodies, habitats and environments, life cycles • Physical science—knowledge of physical properties of objects and materials, manipulating objects and materials; what things are made of and their properties (float or sink) • Earth and space science—knowledge of earth's environment, solar system, universe, such as seasons, weather, time of day • Tools—using tools and technology to perform tasks; using tools to investigate (magnifying glass, binoculars, funnel) Tool is a device or utensil to carry out a particular function or aids in accomplishing a task 		
<p><u>Process</u></p> <ul style="list-style-type: none"> • Observation: Uses senses to observe and explore materials and natural phenomenon • Explore and Question • Makes Prediction or Hypothesis: Make a guess. • Experiment: Test hypothesis <ul style="list-style-type: none"> • Collect and Organize Data: what happened, what characteristics, compare • Conclusion: What happens • Report: Say/communicate what happened to others, use science vocabulary in conversations, make drawings, simple charts; make models 		

Some ways to apply science concepts:

- Add factual information through talking or reading book on a science topic (noted under Content)
- Use actual items or props to explain or show
- Can you encourage children to look at a situation from different points of view, alternative solutions
- Use science terms: what vocabulary words can you use to support science concepts? Learn and plan ways to use and help children understand the words. Exposure to the words is a first step to comprehension, even if they do not fully understand the concept now.
- Ask: What do you observe?
- Ask questions that support thinking, observing, predicting
- Ask: What if ... ? or What do you think would happen if ...? How could ... ?
- Compare items by characteristic—texture, function, habitat, etc.
- Can you make a hypothesis, a prediction, or have the children make them?
- What content or topic can be expanded on related to science information?
- What equipment or tools can be talked about or used? Magnifying glass, tools for building, gardening, cooking, etc.
- What science concepts are being explored in books or rhymes?
- What is something made of? What properties of objects might you be able to explore?
- Can you talk about change over time such as seasons, growth, etc.
- Can you talk about cause and effect?
- Offer opportunities to draw/write/record observations.
- Think aloud to show how you reason.