

Plant Growth/Development: Suggestions for Collecting Work Samples

We are fortunate that our science curriculum is very inquiry oriented. At each grade level there are many opportunities built-in for students to do inquiry. Often all that is necessary is remove some of the teacher direction and structure, but supply students with available materials. We have identified opportunities for inquiry work samples in Plant Growth and Development. Although these activities provide an opportunity for students to **demonstrate all four components** of inquiry, they can also be used to give students practice on individual components.

Lesson	Lesson Title	Description
3-12,16	<ul style="list-style-type: none"> • Planting the Seed • How Does Your Plant Grow? • Observing Leaves and Flower Buds • Observing the Growth Spurt • Why Are Bees Important? • Getting a Handle on Your Bee • Looking at Flowers • Pollinating Flowers • Observing Pods 	<p>The whole unit provides an opportunity for an observational investigation of the life cycle of a plant.</p> <ul style="list-style-type: none"> • Students measure plant heights, number of leaves, and number of seeds produced. They might also investigate how long each of the stages last. • Another possibility would be for students to plant “normal” radish seeds and compare the life cycle with the “Fast Plants.” • At the beginning of the unit students could brainstorm a variety of things that might affect plant growth and development: grow light vs. no grow light, fertilizer vs. no fertilizer, watered from the bottom or watered from the top, pollinated with bee sticks not pollinated etc. Students could choose one variable to explore to compare to plants grown under the suggested conditions. It would be important that some “control” plants were grown under the suggested conditions so a comparison could be made.
10	<ul style="list-style-type: none"> • Looking at Flowers 	<ul style="list-style-type: none"> • Students could design and conduct an investigation comparing different types of flowers.