Begin life cycle anew; students are provided the opportunity to replant seeds and conduct individual experiments. They may change variables (e.g., light, fertilizer, bee stick, # of plants per cell, thin vs. not thin).

**Lesson 2**

**What's Inside a Seed?**

Students observe and examine a soaked bean seed, record observations, draw and label parts of the seed.

**Lesson 3**

**Planting Seeds**

Students set up their planters and plant the seeds.

**Lesson 4**

**Thinning and Transplanting**

Students discuss purpose for thinning and transplanting and learn how to do these two tasks.

**Lesson 5**

**How Does Your Plant Grow?**

Students learn how to measure their plants and begin keeping records of their plant growth.

**Lesson 6**

**Observing Leaves and Flower Buds**

Students observe two developments: true leaves and flower buds. They record observations and review the life cycle of a plant through this stage of development.

**Lesson 7**

**Observing the Growth Spurt**

Students measure plant height and record; make predictions about plant growth and analyze their data on the growth spurt.

**Lesson 8**

**Why Are Bees Important?**

Students share information about bees, ask questions, and draw a picture of what they think a bee looks like.

**Lesson 9**

**Getting a Handle on Your Bee**

Students use hand lens to observe dried bees and make bee sticks to use as a tool for pollination.

**Lesson 10**

**Looking at Flowers**

Students observe details of a flower's anatomy and identify major parts, then learn more about the crucifer family.

**Lesson 11**

**Pollinating Flowers**

Students use the bee sticks to cross-pollinate their plants; they read more about the interdependence of bees and flowers.

**Lesson 12**

**Observing Pods**

Students observe the development of the fertilized pod and record their observations by drawing, writing, and graphing.

**Lesson 13**

**Making a Brassica Model**

Students apply skills learned to construct an accurate model of the Brassica plant.

**Lesson 14**

**Making a Bee Model**

Students construct an accurate model of a bee.

**Lesson 15**

**Interpreting Graphs**

Students interpret information on two different graphs and apply math skills to reading graphs.

**Lesson 16**

**Harvesting and Threshing Seeds**

Students harvest and thresh seeds, count and compare the number of seeds harvested with the number of seeds planted; think of additional questions; design investigations to answer questions.

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**Plant Growth and Development Conceptual Story**

**K-12 Unifying Concept:** Living things have characteristics that can be used to describe them and are organized into systems that are interconnected and interactions within and among systems that are interconnected and interactions within and among systems.

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**Science & Technology for Children - Grade 3**

**Extensions**