

**Program Description:**

This program is best used to review information that students have already learned and allow them to represent it in a satisfying, mechanically interesting way. While information about life cycles will be discussed during the program, it is not designed to introduce students to biological concepts.

During the program, students review what they know about how plants or animals change during their life cycle. Focusing on a particular plant or animal, the instructor asks the students to match pictures with the name each life stage and to put them in order. Students are shown a life cycle “clock,” in which a moving hand both designates a stage of growth and reveals a model depicting it. Using diagrams as a guide, students create their own models of growth stages and construct a life cycle clock.

**Learning Objectives:**

1. Students will review information about a plant or animal’s life cycle and understand that some organisms undergo distinct changes in form throughout their lives.
2. Students will represent a repeating cycle on a clock face, using numbers to designate stages.
3. Students will use diagrams and background knowledge to design and build models of different stages of a life cycle.

**Alignment with Connecticut Core Science Curriculum Framework:****1.3** *Organisms change in form and behavior as part of their life cycles.*

- Some organisms undergo metamorphosis during their life cycles; other organisms grow and change, but their basic form stays essentially the same.

**2.2** *Plants change their forms as part of their life cycles.*

- The life cycles of flowering plants include seed germination, growth, flowering, pollination, and seed dispersal.

**Key Vocabulary** (depending on the program focus):

*Animals:* life cycle, stage, metamorphosis, egg, caterpillar, pupa, tadpole, gills, lungs

*Plants:* life cycle, stage, seed, germination, root, stem, pollen, pollinate, fruit, seedpod

**Planning your visit:**

Our typical Life Cycle Clock program focuses on one organism (choices include the butterfly, frog, mountain laurel, bean plant, apple tree, and pumpkin vine). **Please let us know which organism you would prefer to study.** If your students have done significant research and planning before your visit, we can also provide a wider range of materials so that students build life cycle clocks for their own choice of organism.

It is very helpful if students have learned about the life cycle stages of the particular organism the program will focus on before the visit, including analyzing the diagrams provided by the museum and identifying how the organism changes throughout its life cycle.