**Biological Sciences – Year 2 – Term 4 – Life Cycles**

*Australian Curriculum Achievement Standard* - ***Students*** [***describe***](http://www.australiancurriculum.edu.au/Glossary?a=&t=Describe) ***changes to living things.***

**Science Understanding**

* Living things grow, change and have offspring similar to themselves

**Science Inquiry Skills**

* Pose and respond to questions, make predictions about [familiar](http://www.australiancurriculum.edu.au/glossary/popup?a=S&t=familiar) objects and events.
* Participate in guided investigations to explore and answer questions, compare observations with predictions.
* Use informal measurements to collect and record observations, using [digital technologies](http://www.australiancurriculum.edu.au/glossary/popup?a=S&t=digital+technologies) as appropriate.
* Use a range of methods to sort, record and share information - drawings and provided tables – discuss, compare observations with predictions.
* Compare observations with those of others.
* Represent and communicate observations and ideas in a wide variety of ways.

**Science as a Human Endeavour**

* recognising that many living things rely on resources that may be threatened, and that science understanding can contribute to the preservation of such resources
* Describe everyday events and experiences and changes in our environment using knowledge of science.
* Science involves observing, asking questions about, and describing changes in, objects and events.

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| **Learning Intentions** | **Exploring through Inquiry** | **Success Criteria** |
| LIVING THINGS GROW, CHANGE & HAVE OFFSPRING SIMILAR TO THEMSELVES  To find out what students know about the way living things grow, change and have offspring similar to themselves  Students observe how some animals change a lot as they grow old & others don’t.  Students investigate the differences between the life cycle of a frog and the life cycle of a platypus | Predict how living things will grow and change  Students compare life cycles of different animals making observations of similarities & differences in their changes  Students compare life cycle of a platypus and a frog, making observations of similarities and differences in their changes | Create drawings of living things when they were younger and older  Students create a visual representation of the life stages of silkworms and humans and arrange the life stages of different animals.  Students use a Fishbone diagram to make observations of similarities and differences between the life cycle a platypus and a frog. |
| THE LIFE CYCLE OF A SILKWORM - UP CLOSE AND PERSONAL  Students investigate the life stages of an invertebrate animal, investigating the growth of a silkworm.  Students conduct an investigation into the growth of the silkworms under different light conditions. | As a class, students discuss how they are going to physically record the progress of the silkworm.  Discuss a range of methods to record and share information on the progress of their silkworm. | Physical recordings of the changes and growth in the life cycle of a Silk Moth as they care for their own silk worm. They measure, make observations and suggestions for improvements in procedure.  Students represent their investigation of the growth of a silkworm under different light conditions and complete their own timelines, present patterns of silkworm growth and interpret their observations. |
| STEM PROJECT  Design a container suitable for holding a silk worm during its life cycle changes  Students | Students plan and construct a container to house their silk worm. | Create a design for a container and construct it to have enough room for the silk worm to grow, ensure that it does not escape, provide ventilation and be able to clean it of castings. |

* representing personal growth and changes from birth
* recognising that living things have predictable characteristics at different stages of development
* exploring different characteristics of life stages in animals such as egg, caterpillar and butterfly
* observing that all animals have offspring, usually with two parents
* recognising that many living things rely on resources that may be threatened, and that science understanding can contribute to the preservation of such resources

