

## Curriculum Organiser – Year 2, Biological Sciences

| Vocabulary and Concepts  |   |
|--|---|
| Learning Intention – We are learning how living things grow, change and have offspring similar to themselves   |   |
| Living things  | Things which can grow, move, breathe and make copies of themselves      |
| Food   | The material that people and animals eat                                |
| Plants   | Living things that can use sunlight to make their own food              |
| Animals  | A living thing that can choose to move itself                           |
| Features   | Parts of a living thing such as head, legs, tail, stem, roots, leaves   |
| Growth/Development   | A process of growing especially through an increase in size or amount   |
| Change   | Become different  |
| Offspring  | The young of a person, animal, or plant                                 |
| Similar  | The same as something else, but with small differences                  |
| Birth  | When an animal or person is born  |
| Young  | Being in the early stage of life, growth, or development                |
| Adulthood  | Fully developed and grown up  |
| Life Stages  | Different parts of a living thing's life                                |
| Key Facts  |   |
| 1  | All living things grow and change                                       |
| 2  | All living things have offspring similar to themselves                  |
| 3  | Living things have predictable characteristics at different life stages |
| 4  | Offspring usually have 2 parents  |
| Science as Human Endeavour   |   |
| Science knowledge helps people to understand the effect of their actions - for example   |   |
| - Scientists use knowledge of growth and development to help the environment – eg. Cane toads<br><a href="http://www.abc.net.au/btn/classroom/cane-toads/10537370">http://www.abc.net.au/btn/classroom/cane-toads/10537370</a> |   |
| Science Inquiry Skills   |   |
| Represent and communicate observations, ideas and findings using formal and informal representations   |   |
| Pose and respond to questions, and make predictions about familiar objects and events  |   |
| Aboriginal Perspectives  |   |
|  |   |

### **Australian Curriculum Achievement Standards**

By the end of Year 2, students describe changes to objects, materials and living things. They identify that certain materials and resources have different uses and describe examples of where science is used in people's daily lives. Students pose and respond to questions about their experiences and predict outcomes of investigations. They use informal measurements to make and compare observations. They record and represent observations and communicate ideas in a variety of ways.

## *Language Teaching to Support Teaching Science Inquiry Skills*

### *Skill No 1 - Pose and respond to questions about familiar objects and events*

|                            |  |
|----------------------------|--|
| <b>Language Function 1</b> | <b>Asking questions</b>  |
| Sentence Structures        | <p>What do _____? What will happen if _____?</p> <p>Where do _____? Where does _____? Where will?</p> <p>When is _____? When does _____? When would _____? Where will _____?</p> <p>How does _____? How would _____? How will?</p> |
| <b>Language Function 2</b> | <b>Answering questions to share observations</b>   |
| Sentence Structures        | <p>_____ changes by _____ A baby (noun) has _____</p> <p>An adult (noun) is _____</p> <p>(noun) is _____ I observed that _____</p>   |

### *Skill No 2 - Describe changes to living things*

|                            |   |
|----------------------------|---|
| <b>Language Function 1</b> | <b>Describing</b>   |
| Sentence Structures        | <p>A young _____ looks like...</p> <p>An adult _____ has...</p> <p>When a _____ is young it _____.</p> <p>When it grows up, a _____ has _____</p> <p>A _____ starts life as a _____</p> |

## *Grammar to Teach*

Use of general nouns

Use of present tense – e.g. Koalas eat eucalyptus leaves

Use of common adverbs to facilitate description – quickly, slowly

Use of technical terms related to the topic

Use of singular and collective pronouns – it, they

Year 2 Rubric

| A   | B   | C  | D  | E   |
|---|---|--|--|---|
| Use of accurate diagrams, other representations and relevant science terminology to coherently communicate ideas  | Use of diagrams, other representations and relevant science terminology to communicate ideas  | Use of diagrams and other representations to communicate ideas                   | Communication of ideas using everyday language   | Fragmented communication of ideas   |
| <u>clear and informed</u> description of changes to objects, materials and living things  | <u>informed</u> description of changes to objects, materials and living things  | description of changes to objects, materials and living things                   | <u>guided</u> description of changes to objects, materials and living things                           | <u>statements</u> about changes to objects, materials and living things                                 |
| use of informal measurements to <u>systematically</u> make, <u>accurately</u> record, <u>clearly</u> and <u>accurately</u> represent and compare <u>relevant</u> observations | use of informal measurements to <u>systematically</u> make, record, <u>clearly</u> represent and compare <u>relevant</u> observations | use of informal measurements to make, record, represent and compare observations | use of informal measurements to make, record, represent and compare observations <u>under guidance</u> | use of informal measurements to make, record, represent and compare observations <u>under direction</u> |

NB – the following terminology will be helpful in making grading choices.

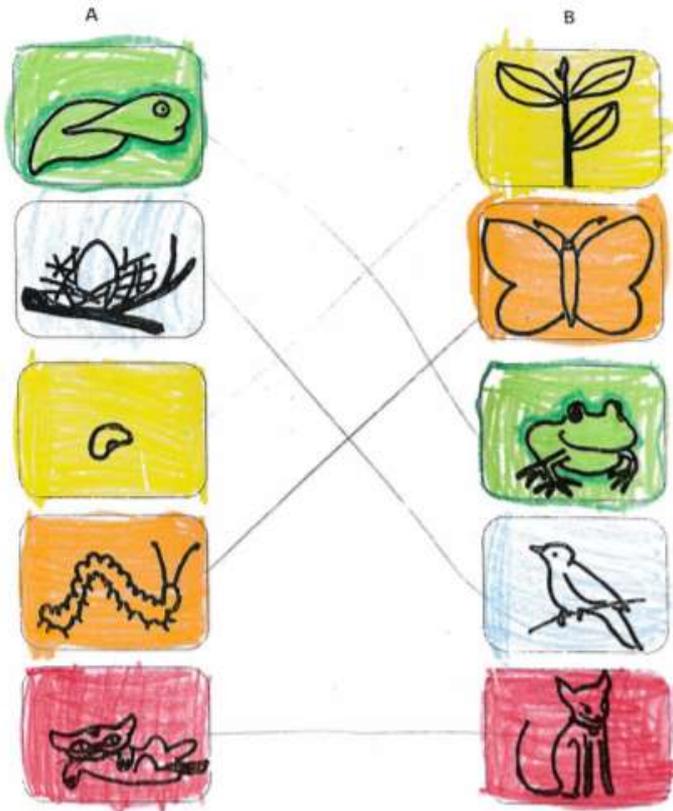
- Knowledge/information refers to facts, concepts, principles, laws, theories and models that have been established by scientists over time;
- Understanding - the concepts underpinning and connecting knowledge in a learning area, *related to a student's ability to appropriately select and apply knowledge* to solve problems in that learning area
- Fragmented - disjointed, incomplete or isolated
- Informed - Having relevant knowledge; being conversant with the topic; in the context of Science, informed means referring to scientific background knowledge and/or empirical observations
- Reasoned - logical and sound; presented with justification; in the context of Science, reasoned also means that the evidence is provided through reference to scientific background knowledge and/or empirical observations as part of the justification

Further information is available at [https://www.qcaa.qld.edu.au/downloads/p\\_10/ac\\_sci\\_yr2\\_se.pdf](https://www.qcaa.qld.edu.au/downloads/p_10/ac_sci_yr2_se.pdf)

# Worksheet: Life stages

## Life stages

Draw lines to match the life stages of these living things:



Choose one picture from column A and explain how it turns into the picture in column B.

It starts off as a tadpole  
then it gets legs and then it  
is a frog

## Annotations

*Links the life stages of a variety of living things.*

*Describes some life stages of a frog.*