

# Science

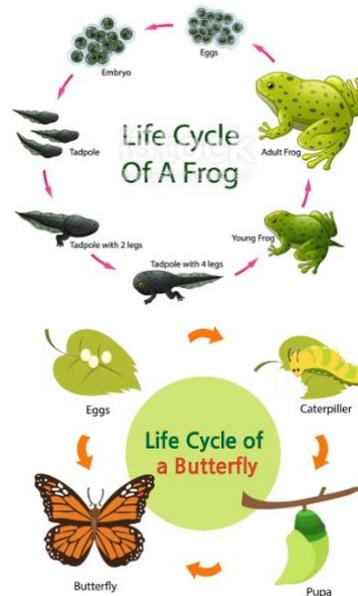
## Animals Year 2 (Animals including Humans)

### Remember when

Grouped and described animals for mammals, fish, reptiles, amphibians and birds. (Y1)  
Vertebrates are animals that have a backbone. (Y1)  
Animals give birth to live young or lay eggs. (Y1)

### Sticky knowledge

All animals have offspring that grow and change into adult animals.  
A life cycle shows each stage of a plant or animals life.  
All animals need water, food and air to survive.  
The offspring of an animal does not always look like the adult.



### Key vocabulary

carbohydrates  
dairy  
diet  
exercise  
fruits  
fats  
healthy  
hygiene  
life cycle  
medicine  
nutrition  
offspring  
proteins  
survive  
survival  
vegetables

### National Curriculum

- Notice that animals, including humans, have offspring which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

### Common Misconceptions

Some children may think:

- an animal's habitat is like it's home.
- all animals that live in the sea are fish.
- a life cycle is perfectly circular (old people have babies, not younger adults)
- an animal's offspring is always a smaller version of the parent.

| LO and enquiry type   | Knowledge and Skills  | Lesson outline   |
|---|---|--|
| <p>Lesson 1</p> <p>LO: To understand what animals need to survive.</p> <p>Enquiry type: Research</p>              | <p>SK: All humans and animals need water, food and air to survive.</p> <p>Skill: asking simple questions and recognizing that they can be answered in different ways.</p> | <p>What did humans need (A2) to survive?</p> <p>Building on from Y1 knowledge:</p> <p>How do you look after a pet? Do different pets need different things? (inc. exotic pets) Compare to wild animal survival. To move this on from year 1, children need to focus on the need for water, food and air- survival rather than how to be a good pet owner.</p> <p>In books/ as a class - Pupils ask their own questions about animal survival and decide how their questions could be answered (encourage other ways except looking on the internet).</p> |
| <p>Lesson 2</p> <p>LO: To know that adult and young animals may look different.</p> <p>Enquiry type: Research</p> | <p>SK: All animals have offspring that grow and change into adult animals.</p> <p>The offspring of an animal does not always look like the adult.</p>                     | <p>Children to recap knowledge of animal groups. Then match up a range of animals with their offspring and write relevant facts about each. Include animals from each group learnt about in year 1.</p> <p>LA – Match up images of adult and offspring</p> <p>ARE – Match up images of adult, offspring and given facts.</p>   |

|  |   |   |
|--|---|---|
|  | <p>Skill: identifying and classifying</p>   | <p>GD – Match up images and write their own facts to demonstrate their knowledge and understanding.</p> <p>Answer the question: Do young and adult animals look the same?</p>   |
| <p>Lesson 3</p> <p>LO: To sequence and compare the life cycles of insects.</p> <p>Enquiry type: Observation</p>                                      | <p>SK: All animals have offspring that grow and change into adult animals.</p> <p>A life cycle shows each stage of a plant or animals life.</p> <p>Skill: observing closely, using simple equipment.</p>                    | <p>Hatch caterpillar egg to observe the growth and development over time.</p> <p>Discuss life cycles using stories (e.g. A tadpoles promise)</p> <p>Record an observational diary over the week/two weeks and record conclusion in science books. Use photographs.</p> <p>Whole class – Set up observational diary and caterpillar eggs.</p> <p>Sequence life cycle of a caterpillar/butterfly.</p>   |
| <p>Lesson 4</p> <p>LO: To know the stages of the life cycles of mammals and reptiles.</p> <p>Enquiry type: Observation /Comparison</p>               | <p>SK: All animals have offspring that grow and change into adult animals.</p> <p>A life cycle shows each stage of a plant or animal's life.</p> <p>Skill: observing closely, using simple equipment.</p>                   | <p>Children to recap knowledge of animal groups. Discuss that not all off spring looks like the adult. How do animals gradually change throughout their life? These are what makes up the different stages of a life cycle. Some animals have more stages.</p> <p>Sequencing life cycles for mammals and reptiles.</p> <p>LA – With support, sequence a mammals life cycle and then sequence a reptile's.</p> <p>ARE – Sequence a mammal's life cycle and then sequence a reptile's life cycle.</p> <p>GD – Sequence a mammal's life cycle and then sequence a reptile's life cycle. Compare them.</p> <p>Discuss similarities and differences between the two life cycles.</p> |
| <p>Lesson 5</p> <p>LO: To know the stages of the life cycles of amphibians and birds.</p> <p>Enquiry type: Classifying, grouping and identifying</p> | <p>SK: All animals have offspring that grow and change into adult animals.</p> <p>A life cycle shows each stage of a plant or animals life.</p> <p>Skill: using observations and ideas to suggest answers to questions.</p> | <p>Children to recap knowledge of animal groups before sequencing life cycles for amphibians and birds.</p> <p>LA – With support, sequence an amphibian's life cycle and then sequence a bird's.</p> <p>ARE – Sequence an amphibian's life cycle and then sequence a bird's life cycle.</p> <p>GD – Sequence an amphibian's life cycle and then sequence a bird's life cycle. Compare them.</p> <p>Discuss similarities and differences between the two life cycles.</p>  |
| <p>Lesson 6</p> <p>LO: To sequence and compare the life cycles of insects.</p> <p>Enquiry type: Observation</p>                                      | <p>SK: All animals have offspring that grow and change into adult animals.</p> <p>A life cycle shows each stage of a plant or animals life.</p> <p>Skill: observing closely, using simple equipment.</p>                    | <p>Record an observational diary over the week/two weeks and record conclusion in science books. Use photographs.</p> <p>Whole class – Add final findings and look through photographs taken throughout the last few weeks. Discuss the life cycle and the different stages witnessed.</p> <p>In books - Create a life cycle from caterpillar to butterfly using photographs.</p>   |
| <p>Working towards</p>   | <p><b>End of unit assessment</b></p> <p>Working at Age related expectations</p>   |   |
|  | <p>Working at a greater depth</p>   |   |