

# Prep

Draw or build (with Lego, playdough, toys ,etc.) an animal's in its habitat (where it lives). Draw what it needs to survive (what does it eat, drink, breathe, take shelter, get it's light and warmth from?). Try adding some labels if you can (adults may assist).

## Year 1

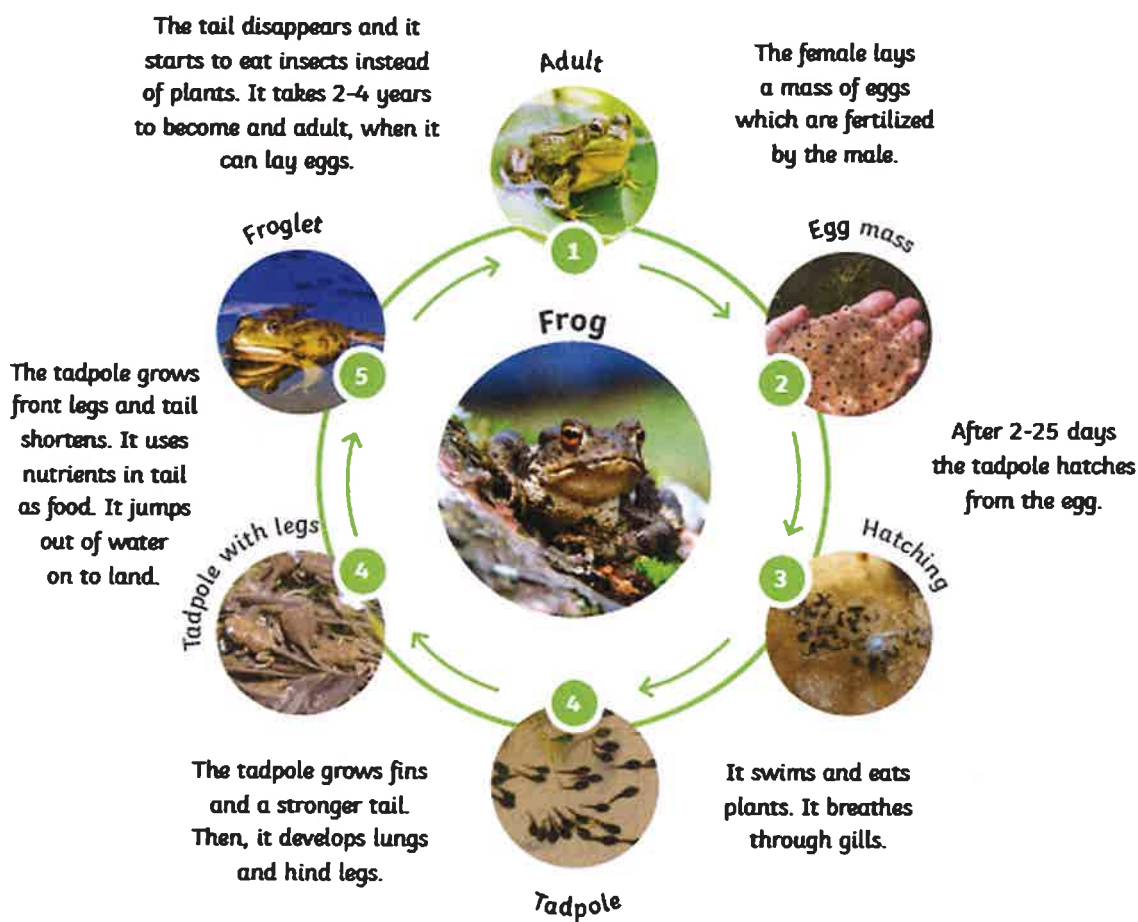


Choose one animal from this picture. Write its name and make a short list of the things it needs to survive. An adult may help you to make this list. Hint: Think about what it eats, drinks, breathes, how it takes shelter, and where get its light and warmth from).

Optional: Write a question you would ask a scientist about your animal.

Year 2

## The Amphibian Life Cycle



### Other Amphibians



Read the 'Amphibian Life Cycle' poster, which shows the life cycle of a frog. Write down a few questions that you could ask a scientist about frog or amphibian lifecycles. An adult may assist with writing if needed.

NOTE: An amphibian is a vertebrate (an animal with a backbone). **Amphibians** are cold-blooded, which means that their body temperature changes with their surroundings. They spend part of their lives in water (breathing with gills) and part of their lives on land (breathing with lungs).

Optional: choose a different amphibian to research and write some interesting facts about. Ask an adult if using the internet.

## Year 3

### Science

#### LIVING AND NON-LIVING: CLASSIFICATION

We can group or classify things as living or non-living.

Living things:




- Grow
- Move
- Have young
- Respond to things around them (are sensitive to stimuli, like noise, danger, heat, cold, movement)

\*\*Other common observable features include taking in air, feeding and producing waste but these are not always easy to actually observe, for example, in plants.

#### Living & Non-Living Investigation

Ask an adult to supervise you as you fill the sheet about investigating 2 living and non-living things you find in your backyard or house. Make sure you use your sense of sight to observe living things only, be gentle with them and do not touch them. Also, do not crawl into bushes, etc. as you must be careful of insect/spider bites. If you cannot print out the sheet that look like the one below, simply draw and label living and non-living things.

Optional extension: Write a question you would ask a scientist about one of the living things that you found.

Investigation question: Is it living or not?					
Object	Predict: Do you think it is living? Why do you think this? Y or N	What can you <i>actually</i> observe yourself? (tick/write)   	What else have you observed or know about to justify your thinking? (tick/write)	Which common features of living does it have? (tick)	Was your prediction correct? Y or N?
		<ul style="list-style-type: none"> <li>• moves</li> <li>• grows</li> <li>• responds to stimuli (e.g. heat, light, noise, danger, cold)</li> <li>• other?</li> </ul> <hr/>	<ul style="list-style-type: none"> <li>• grows</li> <li>• has young</li> <li>• feeds</li> <li>• produces waste</li> <li>• takes in air</li> </ul> <hr/> <hr/>	<ul style="list-style-type: none"> <li>• moves</li> <li>• grows</li> <li>• responds to stimuli</li> <li>• has young</li> </ul>	
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## Year 4

### Life Cycles

Research and write down the needs of plants and animals – what do they need to survive?

**All living things have a natural cycle from birth to death.**

**This cycle contains the stages of development.**

The terms used for stages of development in different animals can include:

- egg
- baby
- young
- infant
- juvenile
- adult.

### An Animal Life Cycle

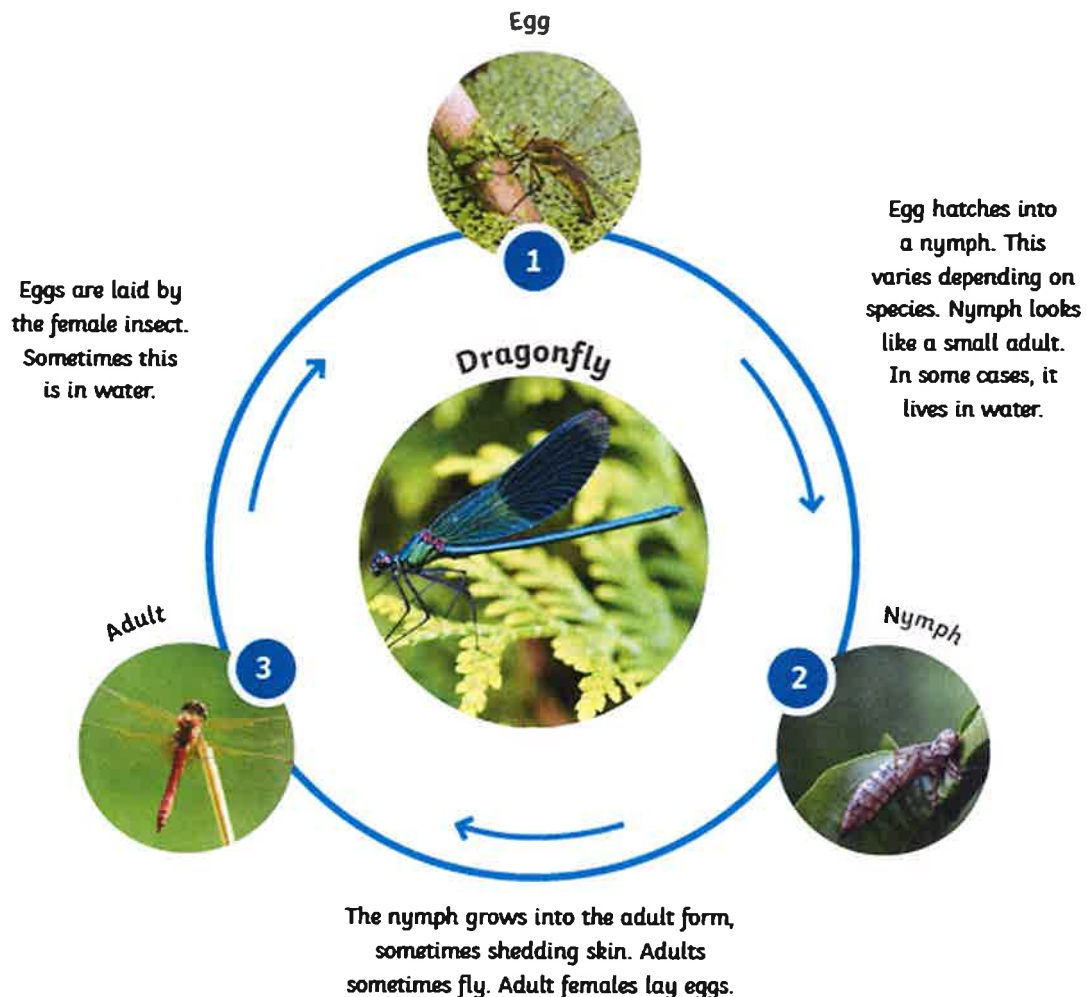
Choose an animal and research it's life cycle. Draw a labelled diagram of your chosen animal's life cycle. Include the names of stages of development, arrows between the stages and some detailed information about each stage of the life cycle. Please gain parental permission/ask an adult to supervise if using the internet.

Alternatively – information about the Sea Turtle's Life Cycle is included, that could be used to do this task.

Here is an example life cycle, to give you an idea of what is required. Of course, you are welcome to add more detail, if you wish.

# The Insect Life Cycle

## Incomplete Metamorphosis



## Year 5

### Science

#### Australian Animal Adaptations

\*Remember:

**Structural adaptations** are the physical traits or characteristics that aid survival. For example: fur to keep the animal warm; plant seeds with hooks that attach to animals so the seeds are spread.

**Behavioural adaptations** are the actions taken by an organism to increase its chance of survival. For example: a frill-neck lizard displaying its neck frill when in danger, to scare off predators; a plant closing its leaves during the hot part of the day to reduce water loss.

1. Complete Sheet 2: Adaptations of Australian Animals.

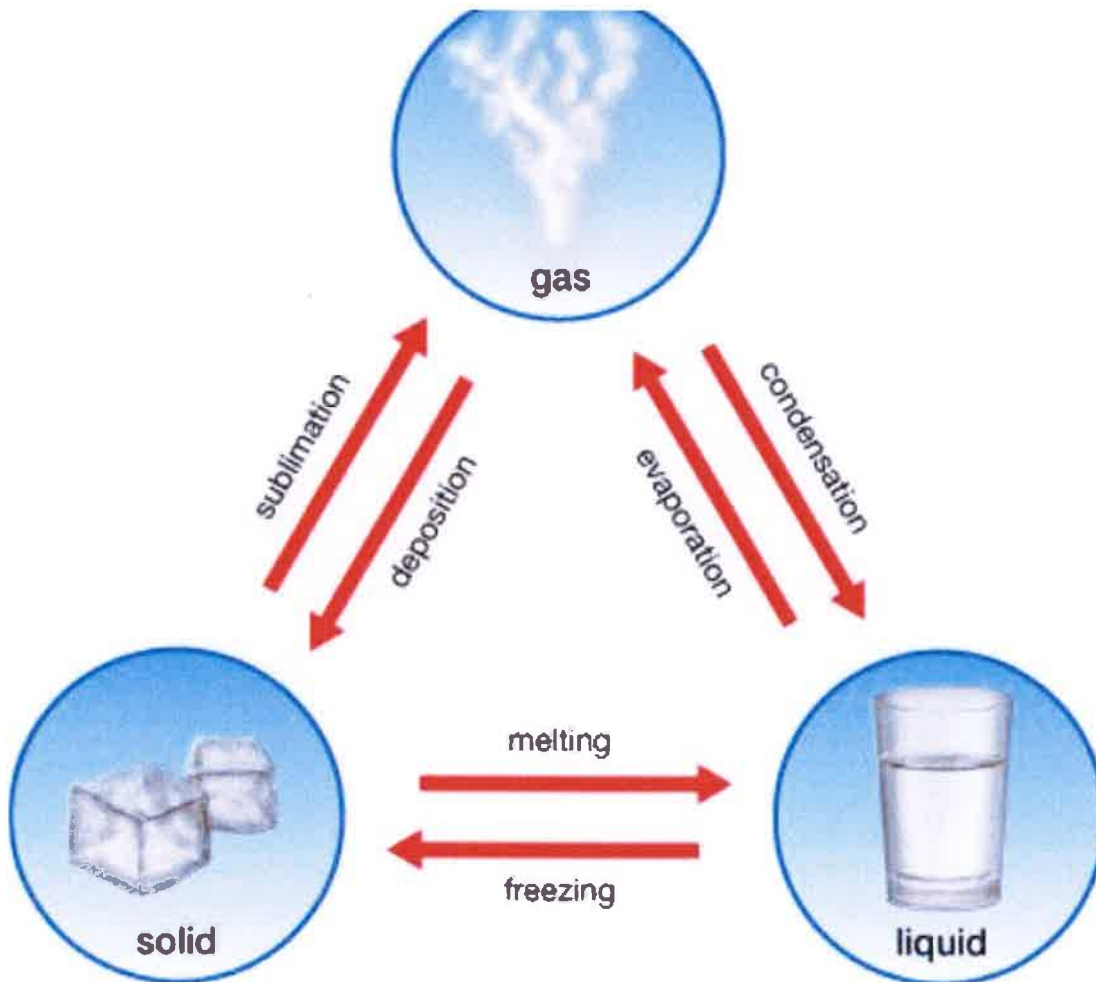
## Year 6

SCIENCE REVISION:

### Changing State

There are 3 states of matter: Solids, Liquids and Gases.

A **change of state** occurs when matter changes from one state to another, e.g. evaporation-liquid changes into gas.



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1. Using this diagram, set a timer for 4 minutes. In that time, make a list of as many examples of changes of state you can think of. E.g. Ice melting (changes state from solid to liquid).
2. Complete the revision 'Reversible or Irreversible changes quiz'. Write your answers down. Give it your best effort and remember that any incorrect answers can be discussed later in class.

REVISION: 'REVERSIBLE OR IRREVERSIBLE? CHANGES QUIZ'

1. Are rusting, burning and cooking **reversible** or **irreversible** changes?
2. Are melting, freezing and evaporating **reversible** or **irreversible** changes?
3. True or false: Most reversible changes are physical changes?
4. Which changes are irreversible:

- a. Frying an egg
  - b. Freezing water to make ice
  - c. Melting chocolate
  - d. Mixing vinegar and bicarbonate of soda
  - e. Dissolving salt in water
  - f. Burning wood
  - g. Making bread into toast
  - h. Water turning into steam
5. True or false: Beating an egg changes the consistency of the egg irreversibly but the chemical composition of the egg will stay the same?
6. True or false: Changes to mixed materials can be reversed by evaporation?
7. Which materials will dissolve in water?
- a. Salt
  - b. Sand
  - c. Sugar
  - d. Pepper
  - e. Instant coffee
  - f. Jelly crystals
  - g. Cooking oil
8. Which is the correct scientific word for describing something that doesn't dissolve in water?
- a. Filtration
  - b. Insoluble
  - c. Solution
9. What would make a solid dissolve quicker in water? (Find 3 correct answers):
- a. Stirring it quickly or longer
  - b. Adding more heat
  - c. Making the solid into bigger pieces
  - d. Making the solid into smaller particles