



What is a life cycle?

During their lives, all living things go through stages as they grow up, get older and die. This is called a life cycle.

Living things all share the same pattern: they are born, they grow up and they die. This is called a **LIFE CYCLE**.

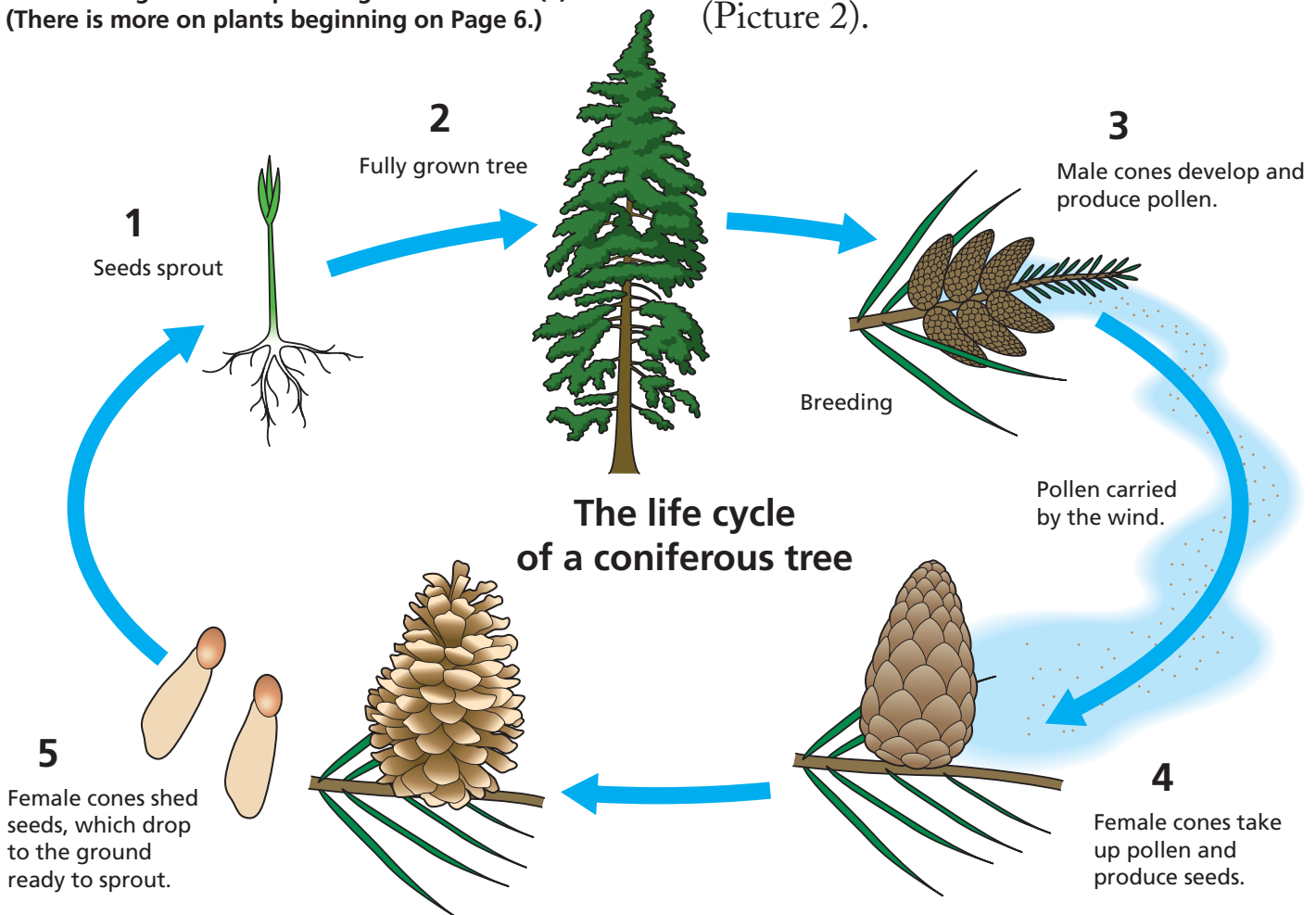
Everything that has ever lived has had a life cycle. In some living things the life cycle can be very long. Some trees live for thousands of years. People can also have

quite a long life cycle, usually about 70 years. But many living things have much shorter life cycles. Many flowering plants, for example, grow up, set seed and die all within a few months. Some insects have a life cycle of just a few days.

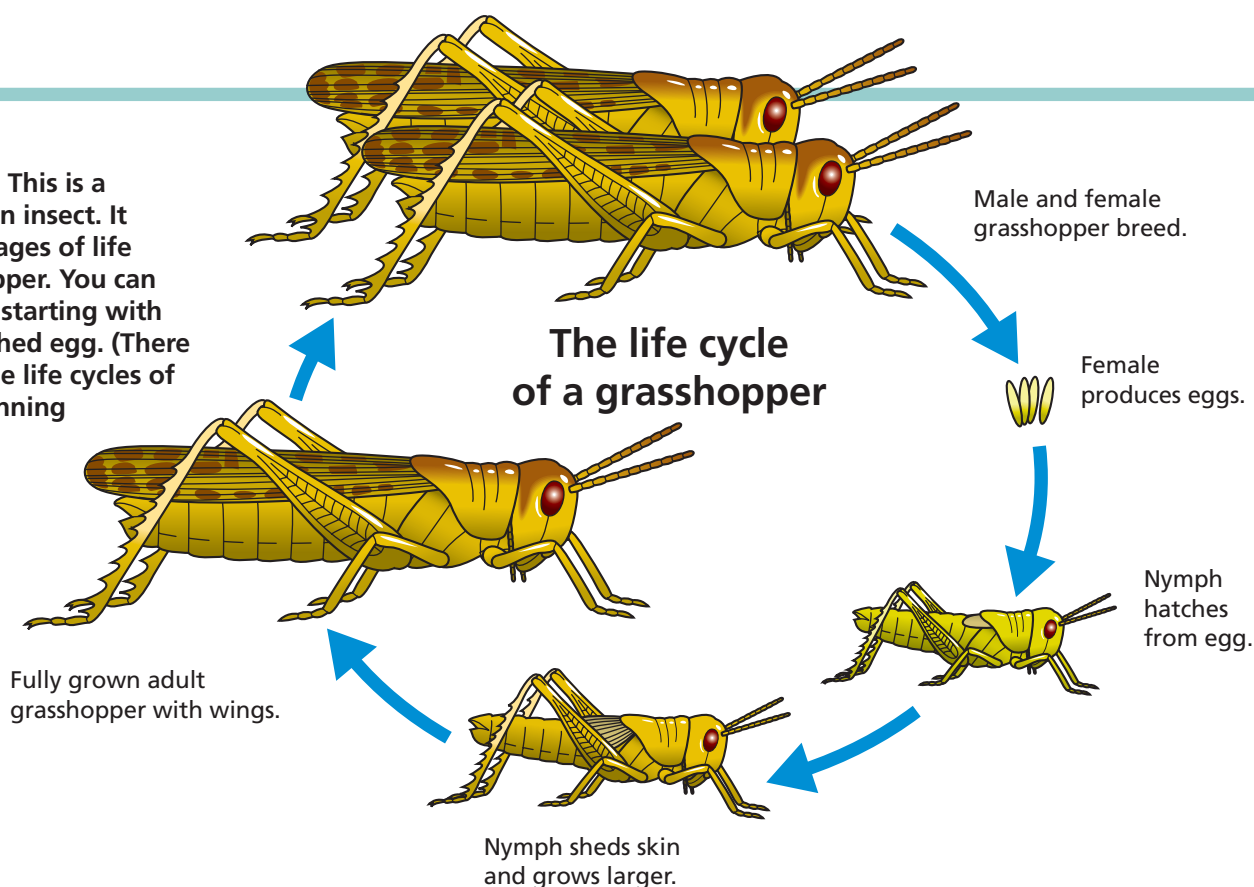
Birth

In plants, the life cycle often begins with the sprouting of a seed (Picture 1). In animals, the life cycle begins with the hatching of an egg, or the birth of young (Picture 2).

▼ (Picture 1) This is a life cycle of a plant. It shows the stages of life of a coniferous tree – the kind we often use for Christmas trees. You can think of it starting with the sprouting of new seeds (1). (There is more on plants beginning on Page 6.)



► (Picture 2) This is a life cycle of an insect. It shows the stages of life of a grasshopper. You can think of it as starting with a newly hatched egg. (There is more on the life cycles of animals beginning on Page 14.)



Growing up

When a living thing begins its life, it is small and weak. If it is a seedling, it can be attacked by disease, be trampled by animals or have its shoot eaten. If it is a young animal, it may also be killed by disease or it may be eaten by other animals for food. But if it survives these early dangers, it grows rapidly and is soon more able to defend itself.

Breeding

When they reach a certain stage, usually close to being fully grown, living things are able to breed, that is they can now produce new living things. This is called **REPRODUCTION**. It is vital if the life cycle is to continue. At this time, differences between male and female living things often become clear.

When plants and animals breed, they produce new young. Female animals often carry the new developing life until it is ready to survive on its own.

After breeding

Some plants and animals die soon after breeding. Butterflies and **ANNUAL** plants are common examples. But others survive longer and breed again. Eventually, however, all plants and animals die.

The stages in a life cycle

By linking the stages of life together in a circle you can see how each stage relates to the others.

Summary

- There are stages in the lives of all living things.
- The stages can be linked together into a life cycle.