



Warmth

Plants are very sensitive to warmth. But each type of plant needs just the right amount of warmth, so plants can be harmed by both too much cold and too much warmth.

A plant will only grow in temperatures that suit it. In parts of the world where there are cold winters, the coolness of autumn causes many plants to stop growing and shed their leaves. They then rest through the winter until the warmth of spring triggers them into growth again. Warmth controls the growing season.

▼ (Picture 1) In harsh conditions, plants can become covered in frost and ice. This will kill many leaves.

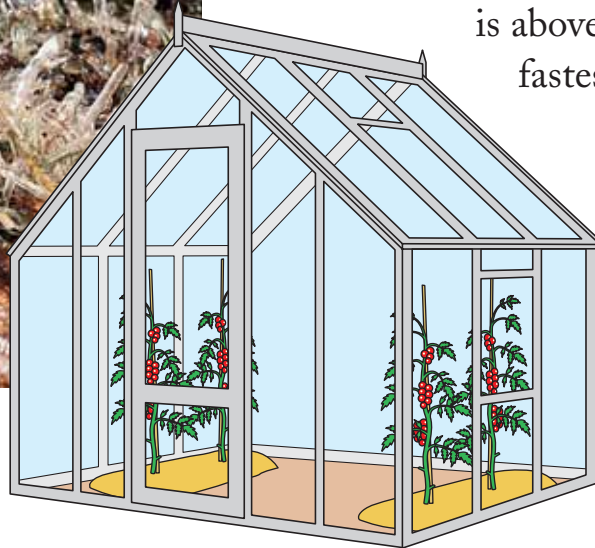


Frost

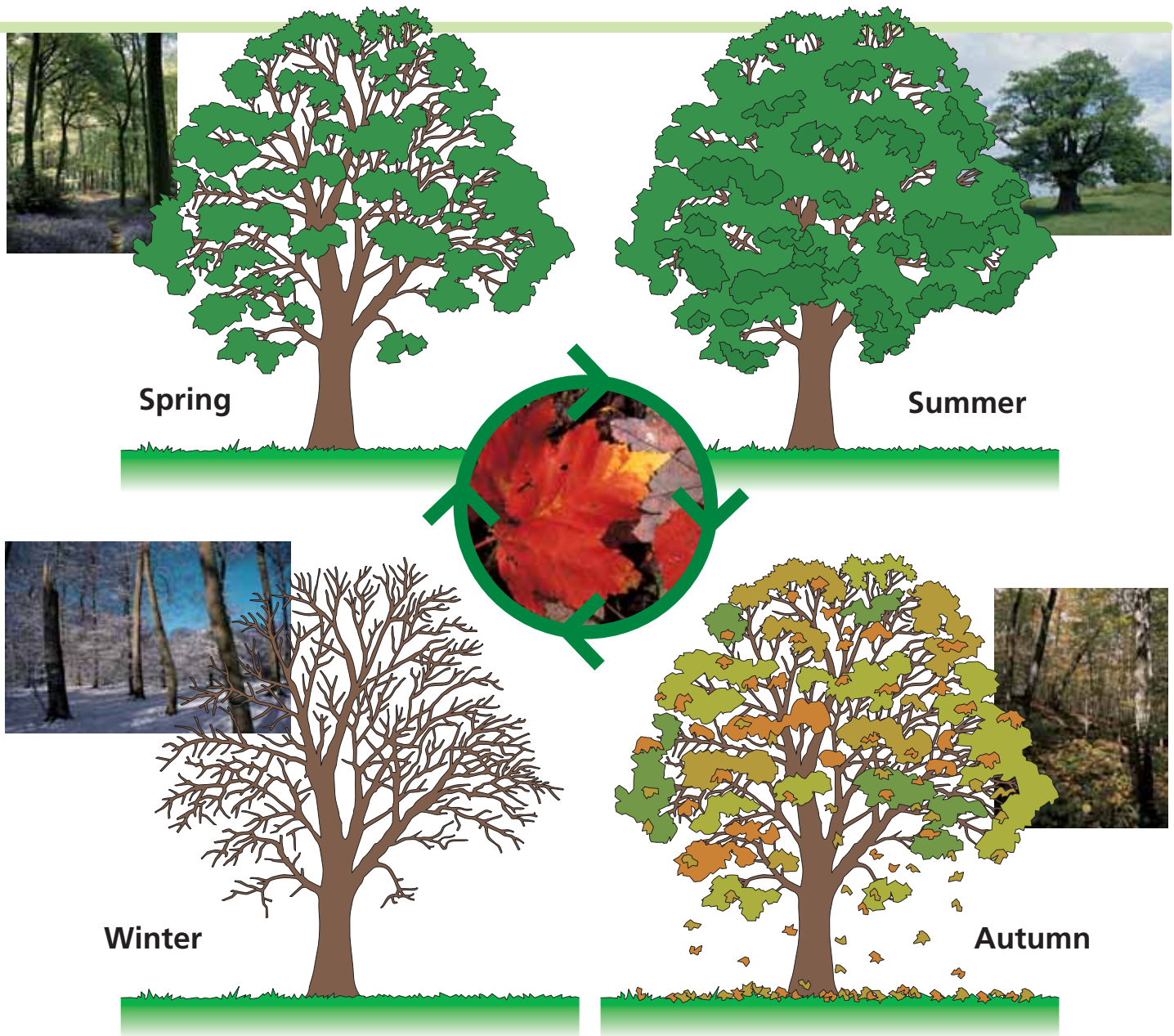
Frost is often a plant killer (Pictures 1 and 2). If the water in plants freezes, it turns to ice and swells. This can burst the leaves apart. You do not notice this during a frost because the plant is frozen solid, but when the plant thaws out, its leaves turn black and die. You will see many garden bedding plants turn black after frosts in autumn.

Growing temperatures

Every plant has its own range of temperatures – when it will start growing, when it will grow best and when it will stop growing because it is too hot or too cold (Picture 3). For example, wheat, which grows naturally in cool parts of the world, will grow if the temperature is above freezing. It grows fastest when its leaves



▼ (Picture 2) You can give plants a warmer, and more frost-free environment by putting them in a greenhouse. In this way they will start to grow sooner in the year.



warm up to 25°C. That is why it grows best at the start of summer. But it stops growing completely when the leaves get hotter than 31°C. That is why wheat will not grow in places where it regularly gets very hot, for example, near the equator.

Some other plants, such as pineapples, need warm conditions throughout the year. That is why pineapples will not grow in cool climates.

▲ (Picture 3) Changes in temperature have dramatic effects on many plants, causing them to shed leaves and stop growing in autumn, to grow new leaves in spring, and to flower in summer.

Summary

- Plants need warmth to grow.
- Frost kills many plants.
- Some plants will not grow if it gets too hot.