

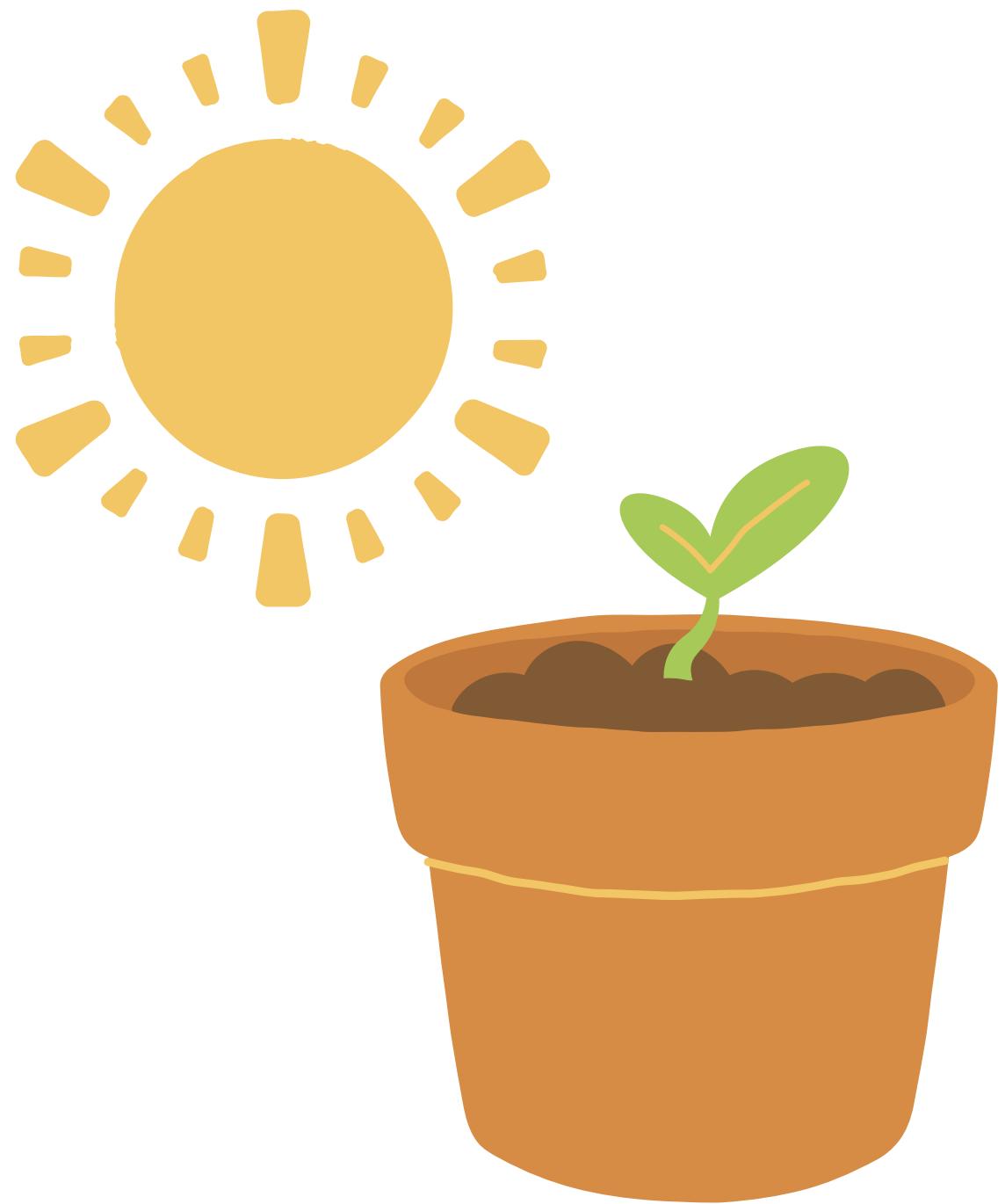
Lesson 17



Asexual reproduction in Plants

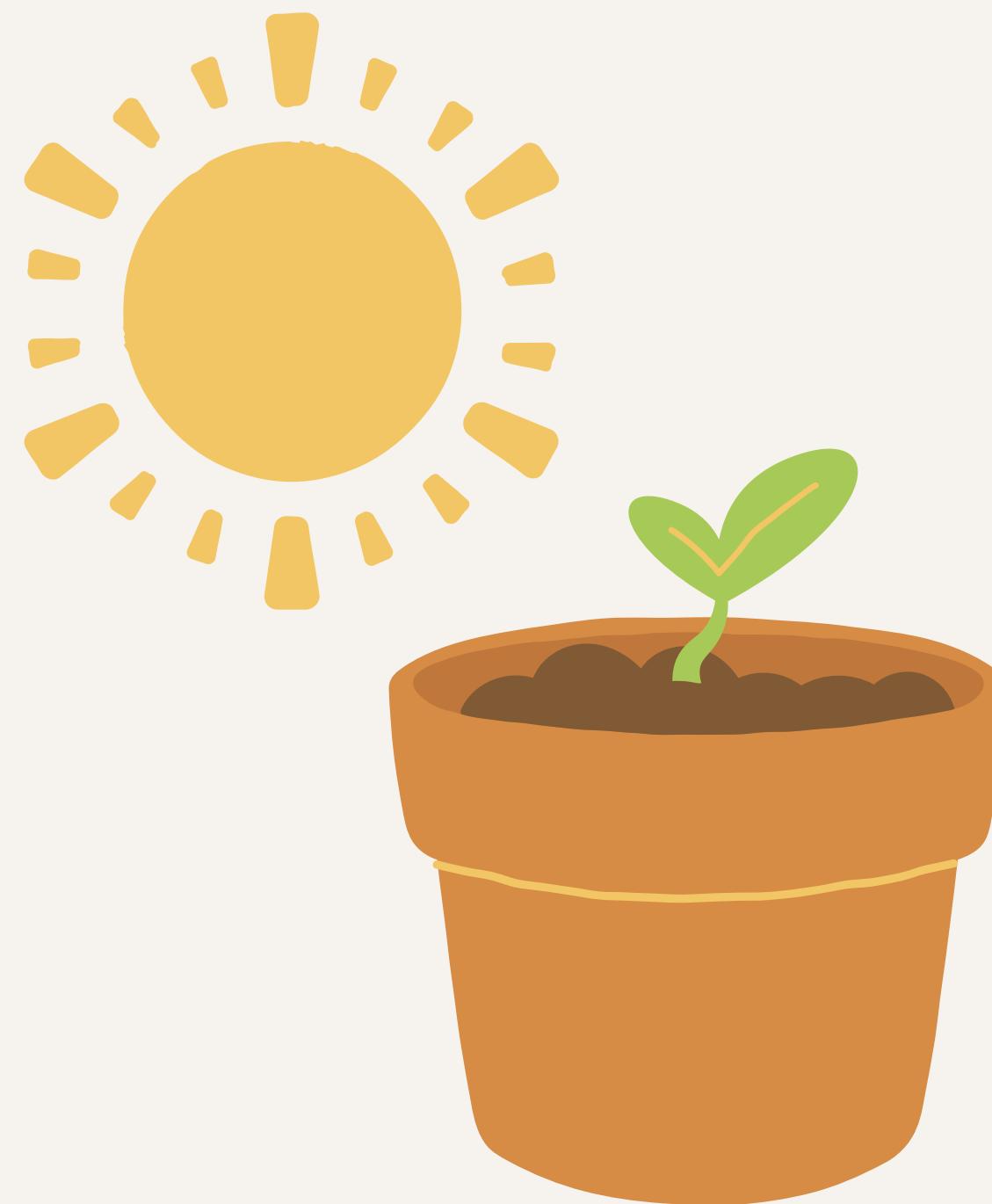
IMPORTANT QUESTION

How do plants reproduce asexually?



Strawberries have horizontal stems which crawl on the ground. These stems are capable of growing into another plant when they are mature enough.



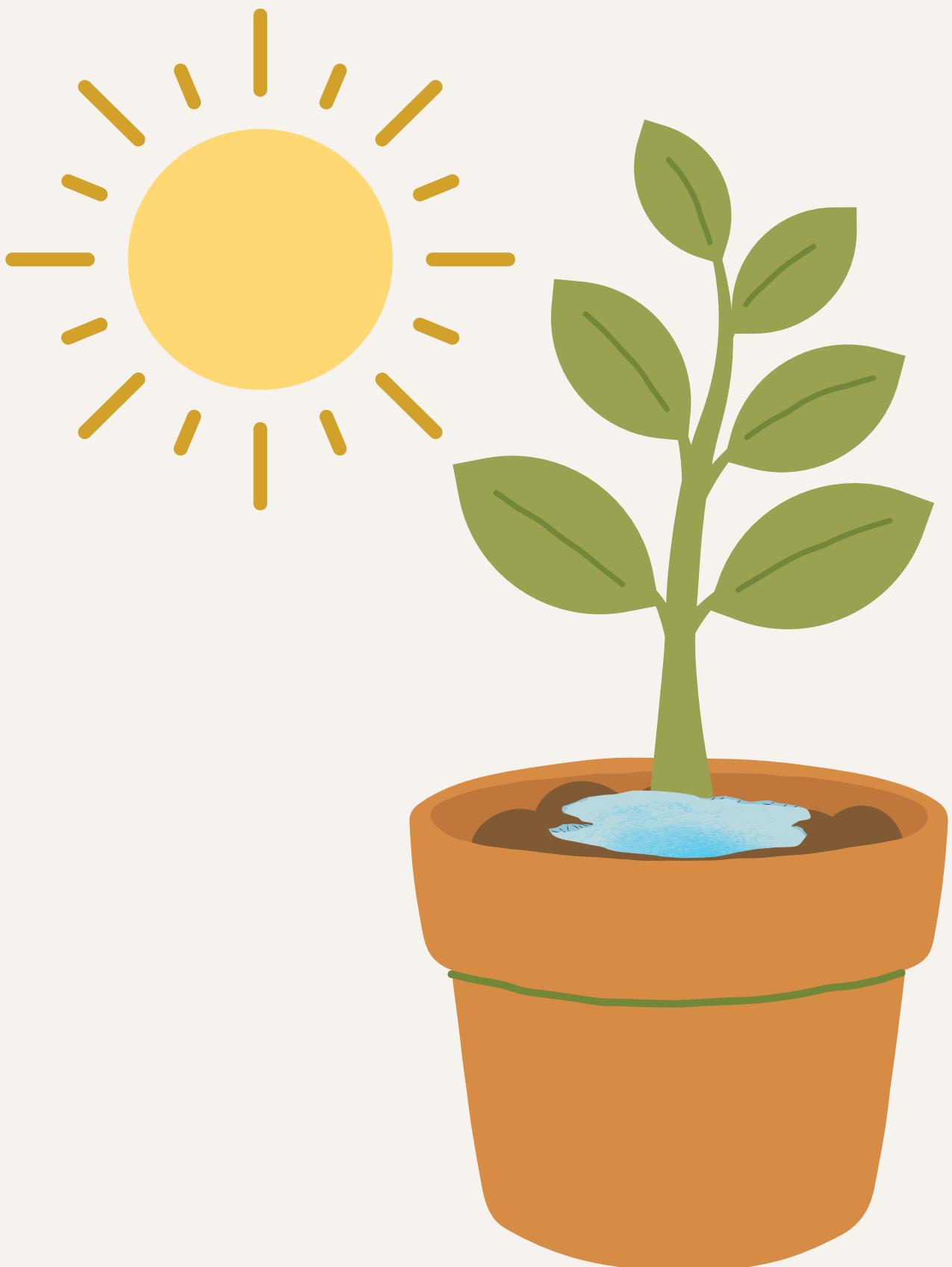


You have previously learned the new plants grow from seeds. However, there are also ways of reproduction in plants that do not involve seeds. This is called asexual reproduction. Vegetative propagation is a form of asexual reproduction where new plants are produced from one part of a parent plant. New plants can grow from roots, stems, and leaves, of a parent plant.

Vegetative Propagation

Some plants can reproduce asexually through their stems.

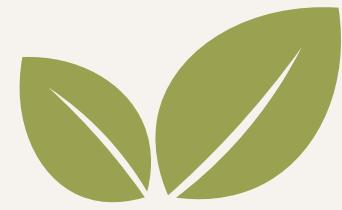
Most shrubs grow through stem cutting where a stem from a present plant is cut and then replanted to grow into a new plant.



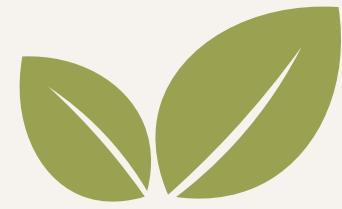
Rose plants, bougainvillea, and sugar cane grow from cuttings.

Some plants have modified stems or roots that are enlarged and serve as food storage. These parts grow underground and new plants can sprout from them.





Bulb – a rounded stem with fleshy leaves (examples: onion, tulip)



Rhizome – a horizontally growing stem (examples: ginger, lotus)



Corn – a short, vertical stem (example: gladiolus, taro or gabi)



Tuber – a fleshy underground stem or root (example: potato-stem, sweet potato-root)

Here are some examples of modified stems and roots

Some modified stems do not grow underground, but instead, crawl along the ground. These are called stolons or runners. Strawberry and certain grasses grow from stolons. New plants can also arise from the leaves of a few plants. ~~katakatakaband~~ some begonia plants have leaves from which young plants grow. The plants grow along the edges of the parent plant's leaves .



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Gumamela can be reproduced by stem cutting.



Potato has specialized stem which can be used for reproduction.



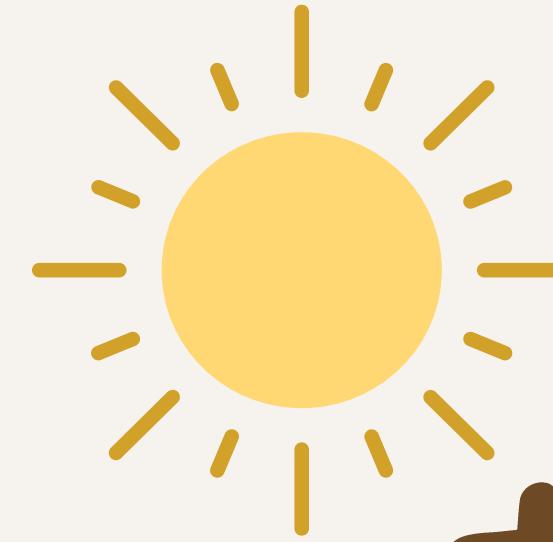
Rhizomes like ginger have horizontally growing stem underground. These stems produce shoots at intervals.



The leaves of kalanchoe plant are able to produce young plants on its edge.

Let's summarize

- Plants reproduce sexually through pollination. Pollination when pollen grains from the anther are transferred to the stigma of a flower.
- Pollination can be self-pollination or cross-pollination
- Asexual reproduction in plants is the production of a new plant with only one parent involved.
- Asexual reproduction can be done using vegetative parts of the plant like roots and stems.



thank You!

