

Life Cycles

Learning Objective:

To describe the process of asexual reproduction in plants.

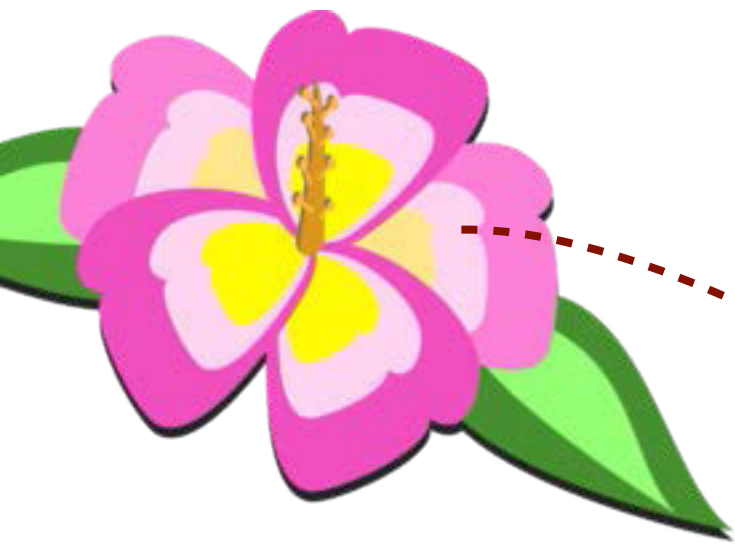
What is **asexual** reproduction?

How does it differ from **sexual** reproduction in plants?



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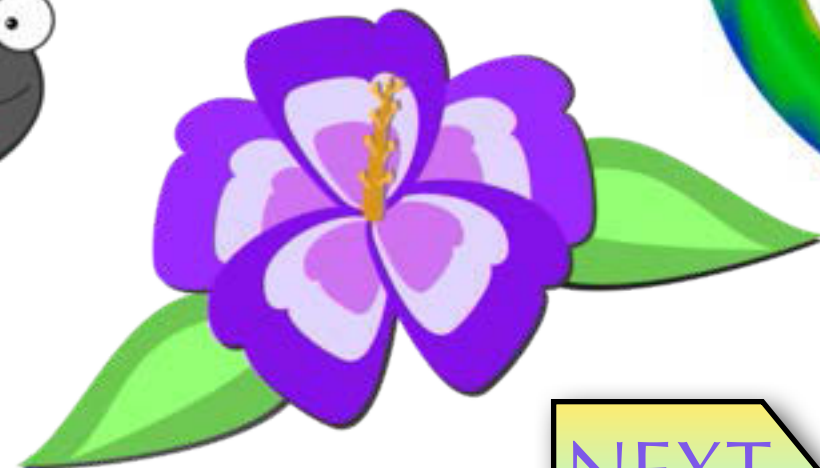
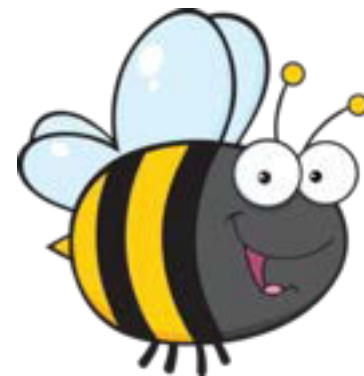
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BUT...
some plants can
reproduce **asexually**
all by themselves!



When flowering
plants sexually
reproduce, **male** genetic
information must combine
with a **female** egg cell to
make a new seed, which
then grows into a plant.



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When plants reproduce **asexually**, only one parent plant is needed. It can produce a new plant all by itself.



Daffodils reproduce asexually. Can you see the new plant growing out of the side of the bulb?

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Some plants, such as crocuses and potatoes, grow stores of food under the ground called bulbs and tubers. These types of plant reproduce asexually by growing new plants off their bulbs and tubers.

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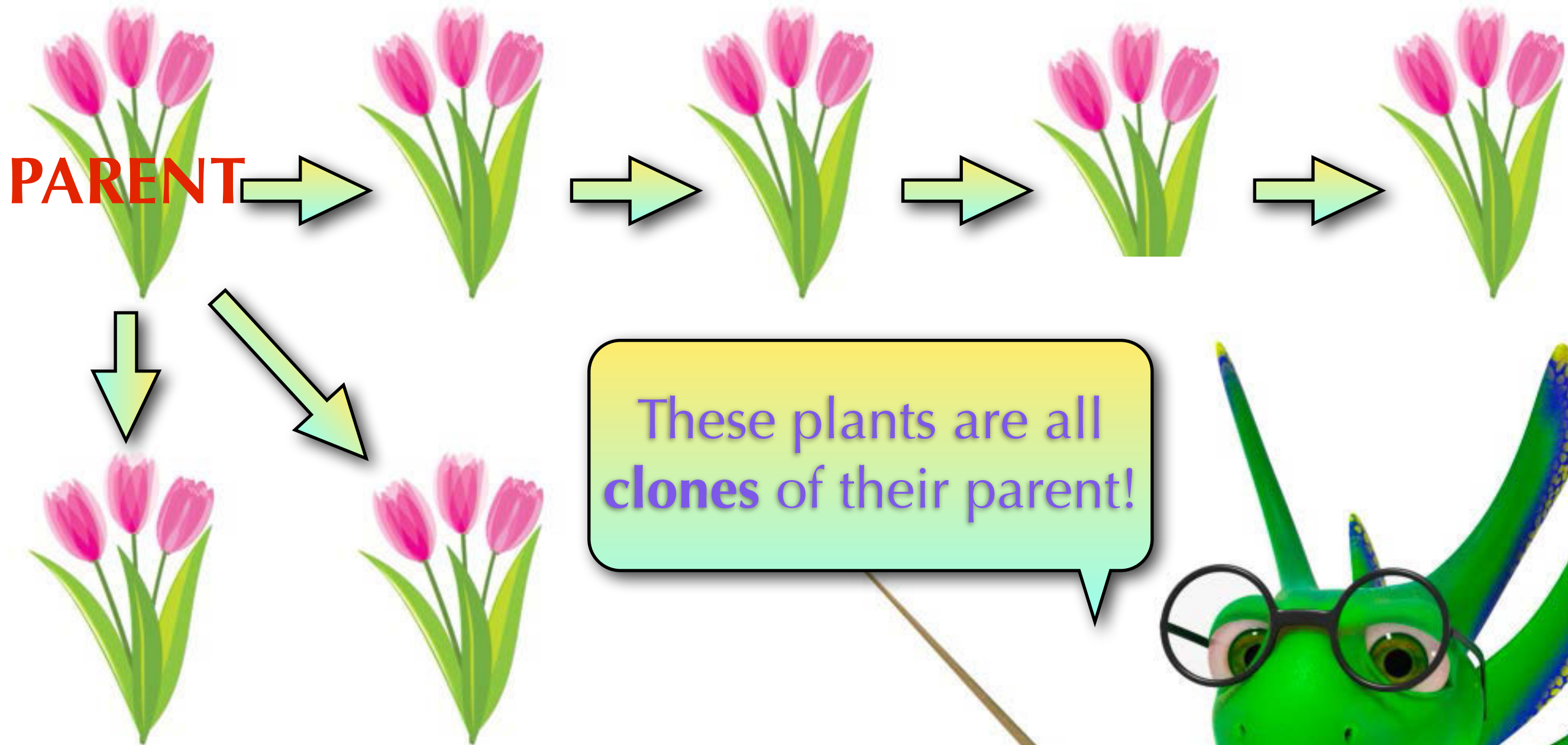
This strawberry plant has grown a runner with three new plantlets.

Other plants
reproduce asexually by
producing side branches or shoots
(called **runners**) carrying new 'plantlets'
on the ends. These runners grow away
from the plant; the new plantlet
grows into the soil.



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When plants reproduce asexually, the children plants are **genetically identical** to the parent. They are **clones** of the parent plant.

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Did you know that humans are involved in plant reproduction too? Clones of parent plants can be made by taking cuttings and growing new plants from them.



This gardener is preparing lavender cuttings for planting. They will grow into new plants which are clones of their parent plant.

Can you think of some reasons why humans clone plants?

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Did you think of these?



There are a number of reasons why humans clone plants. Grapevines that are resistant to disease and produce lots of good grapes are cloned by winemakers.

The tulips in the field above have been cloned so that they all look the same.

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Today we will be
looking at the stages in
the life cycles of asexually
reproducing plants as well as
comparing and
describing them.



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Plenary

Link two or more of these words in a sentence to show what you have learned about asexual reproduction in plants.

asexual

cuttings

parent plant

cloning

bulbs

tubers

runners

reproduction

plantlets

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