# Advantages and Disadvantages

Some plants use sexual reproduction to make new plants, while other plants use asexual reproduction. There are advantages and disadvantages to each type of reproduction. Draw lines to match the statements to 'Advantages' or 'Disadvantages'.

#### **Sexual Reproduction**

Advantages

Disadvantages

REGENT STUDIES

Time and energy are needed to wait for another parent plant to reproduce with.	Diseases will not affect all the individuals in a habitat because they will all be different.	The species can change over time to adapt to new environments and habitats.	Reproduction is not possible for an isolated plant.
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#### **Asexual Reproduction**

Advantages

Disadvantages

Only one parent plant is needed so new plants can be made even if there are no other plants nearby.	There is no variation or difference in new plants, so the species is less resilient to diseases or changes in climate.	The population can be increased quickly.	Good features of the parent plant will always be passed on.
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## Advantages and Disadvantages

Some plants use sexual reproduction to make new plants, while other plants use asexual reproduction. Fill in the diagram with the statements to show the advantages and disadvantages of each type of reproduction.

	Advantages	Disadvantages
Sexual Reproduction		
Asexual Reproduction		





#### Statements

Time and energy are needed to wait for another parent plant to reproduce with.	Diseases will not affect all the individuals in a habitat because they will all be different.	The species can change over time to adapt to new environments and habitats.	Reproduction is not possible for an isolated plant.
Only one parent plant is needed so new plants can be made even if there are no other plants nearby.	There is no variation or difference in new plants, so the species is less resilient to diseases or changes in climate.	The population can be increased quickly.	Good features of the parent plant will always be passed on.

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so new plants can be made	There is no variation or difference in new plants, so the species is less resilient to diseases or changes in climate.	The population can be increased quickly.	Good features of the parent plant will always be passed on.



## Taking Cuttings



Taking cuttings from a plant is an artificial method of asexual reproduction. If you are successful, you will make new plants that are genetically identical to the parent plant! Cuttings are small pieces of stem that are carefully removed from the parent plant and encouraged to form their own roots, making new plants.

Follow these instructions to take cuttings from a geranium plant:



 Cut a side stem that is about 5 cm to 10 cm long off the main stem of the parent plant. You should cut the side stem just below a leaf joint.



2. Carefully cut off all the leaves except the very top ones.



3. Put each cutting in a beaker or jar of water.



4. Place the beaker or jar in a bright place, but not in direct sunlight.



5. Watch your cuttings for a few weeks. If you are successful, your cuttings will develop roots!



 You can then plant each cutting in a pot of compost. You will have created your own cloned plants! Draw a picture or stick a photo of your cuttings in the box.



Explain how each cutting could make a new plant. Use these words to help you: reproduce parent plant new roots identical same clone

Use this space to draw a picture or stick a photo of any of your cuttings that develop roots.





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Explain how each cutting could make a new plant. Refer to asexual reproduction and the fact that each plant will be identical to the parent plant.

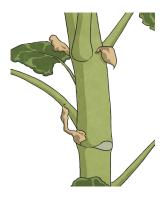
Use this space to draw a picture or stick a photo of any of your cuttings that develop roots.



### Taking Cuttings Focused education on life's walk

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