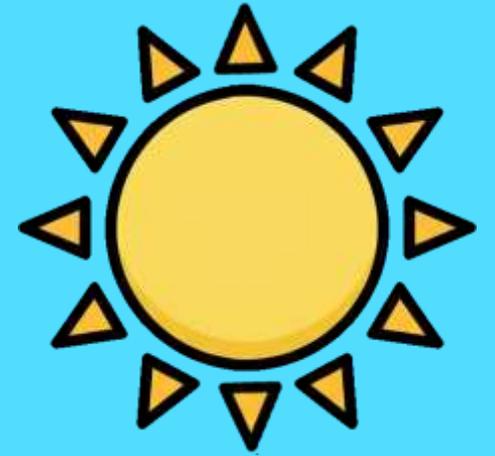


Plant
Needs
Illustrated

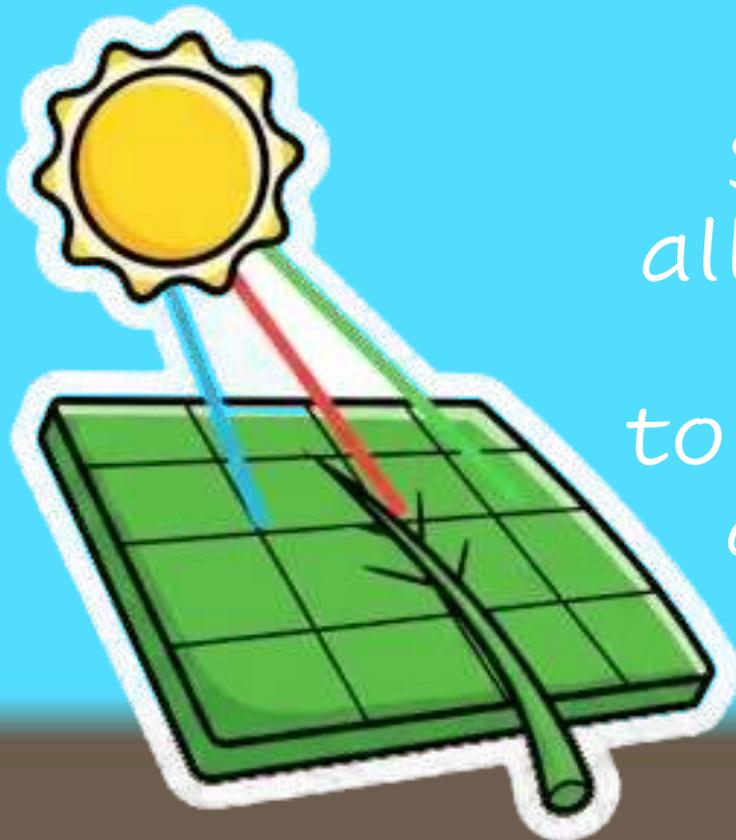


Light

Yeah, you can grow plants with artificial light.



Sunlight provides all the colors of light that plants need to grow, store energy and produce fruit or seeds.



Water

Yeah, plants need water to stay hydrated; But they also can't use nutrients (food) without water.

Rainwater is often better than irrigation because of its purity.

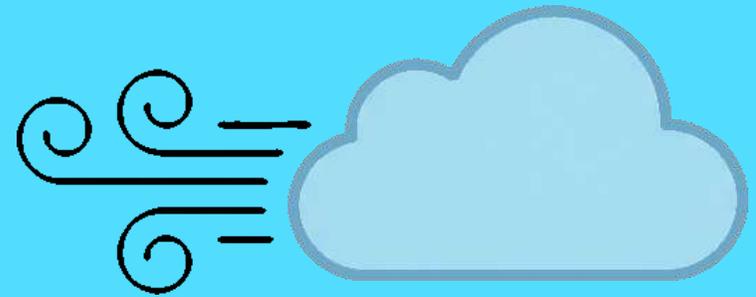


Air

Plants need to breathe too!

Here's what's neat: plants use elements from the air to grow and make sugars.

Plants that don't get enough air flowing around them will easily get sick.

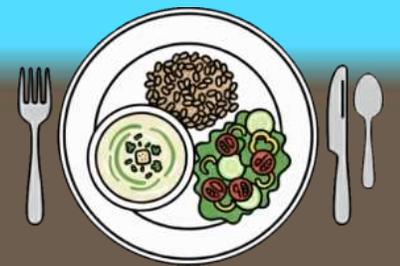


Shelter

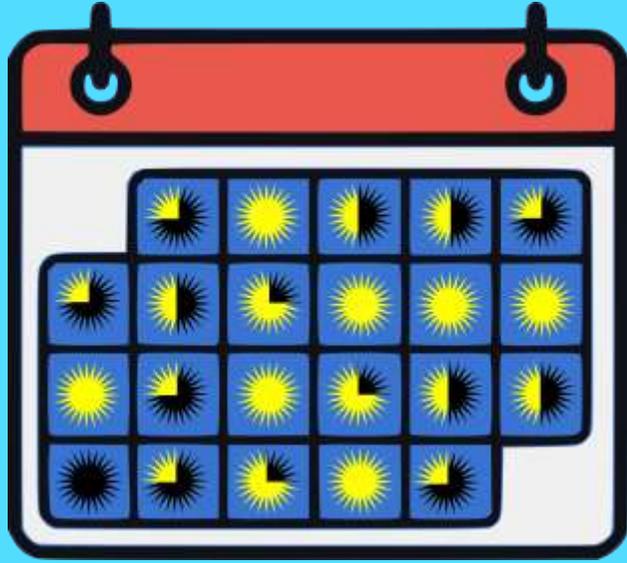
Plants can only live and thrive within certain temperature ranges.



Too much wind also stunts plants



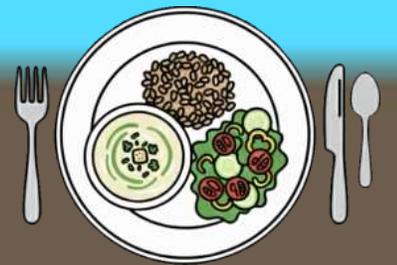
Time to Grow



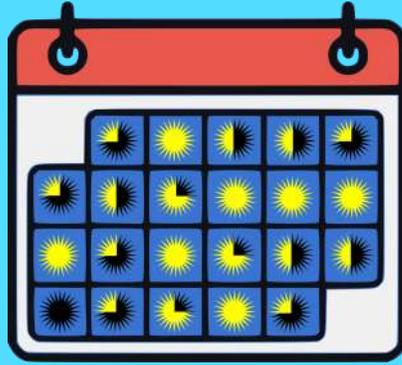
Plants need time to grow and make fruit or seeds.



They need enough days when they stay warm enough and get enough light.

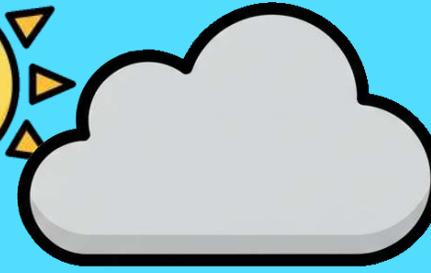
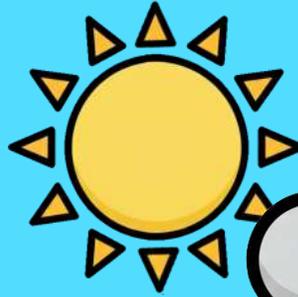


Plant Needs Summary



Time (with enough light)

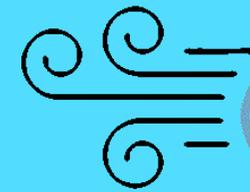
Light



Water



Proper Environmental Conditions



Air

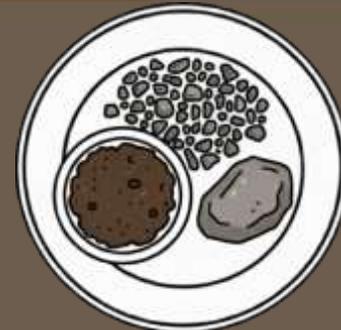
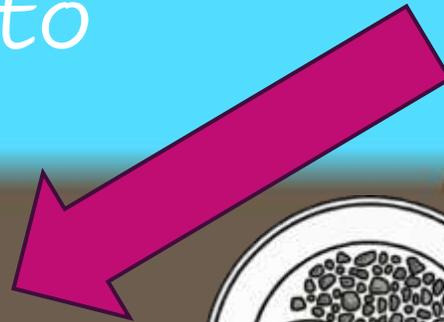
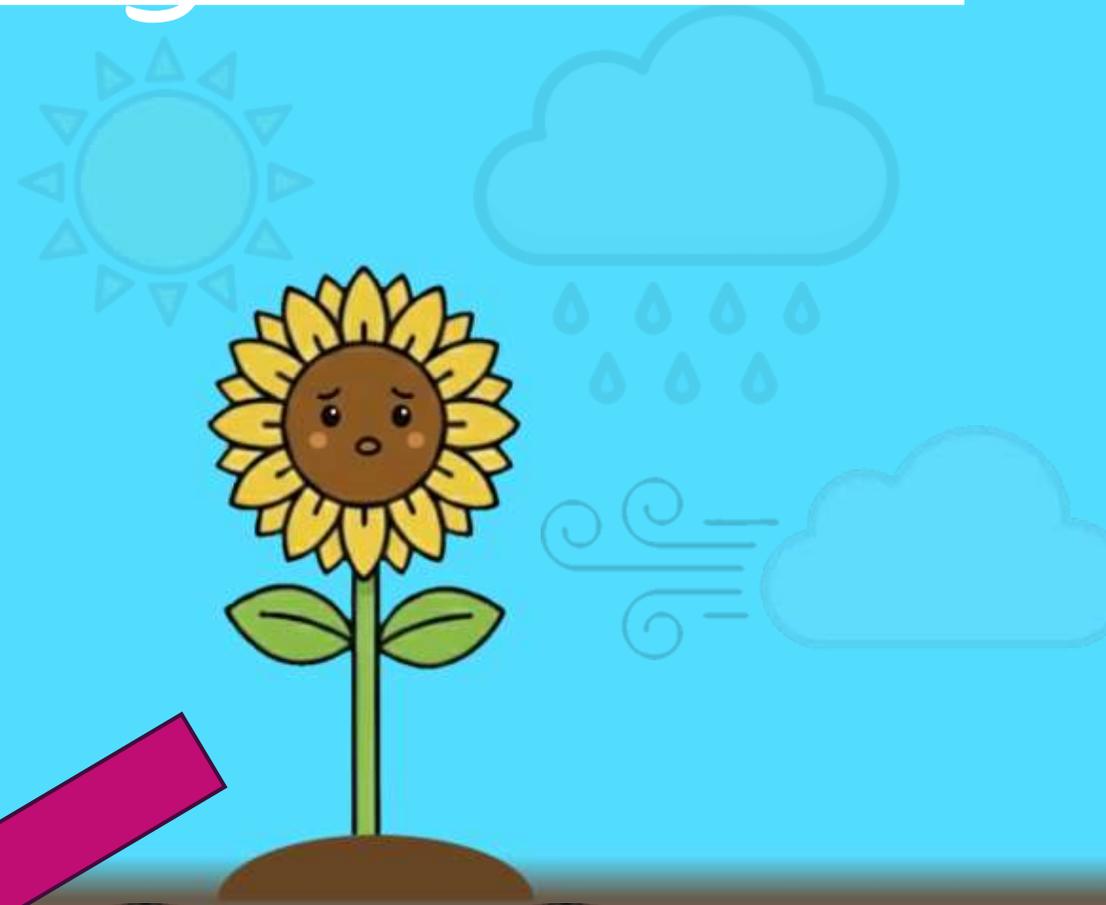


Food
(nutrients)

How do Plants get Food?

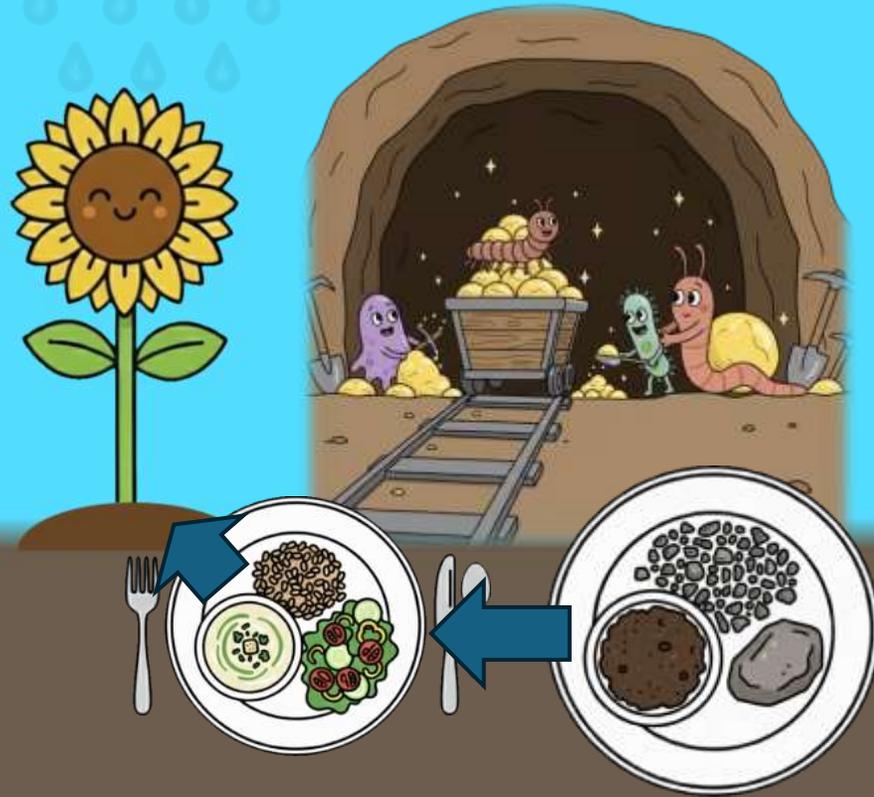
Plants can't just walk to the grocery store...

Rocks and dirt alone don't taste much better to plants than to us.



Food Friends

Plants have a team of friends that make plant food from the dirt and deliver this food to the plants.



Food Friends

Plants have so many friends that help them get the food they need.

Fungi don't just prepare food for plants:
They deliver food that plants can't reach on their own.

Earthworms are plant friends that we can see.
There are many friends that we can't see.

To learn more, research the Soil Food Web



Bacteria make plant food from the dirt

Protection



Weeds like to steal the light, water and food from other plants.

They must be disabled or removed from premises!

Protection



Plants must be protected from the bugs that want to eat them.



There are good bugs that help protect plants from the bad bugs.

Pollination



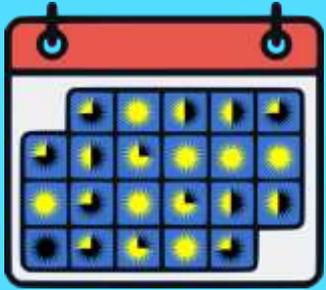
Many plants can't produce fruit or seeds unless they get pollinated.

Bugs such as honeybees love to do this job for plants.

Plant Needs Supply System



Plant Needs Supply System



Time

Pollinators



Light



Water



Air

Soil Critters



Protection from weeds

Proper Environment



Protection from bad bugs



Fungi

Bacteria

