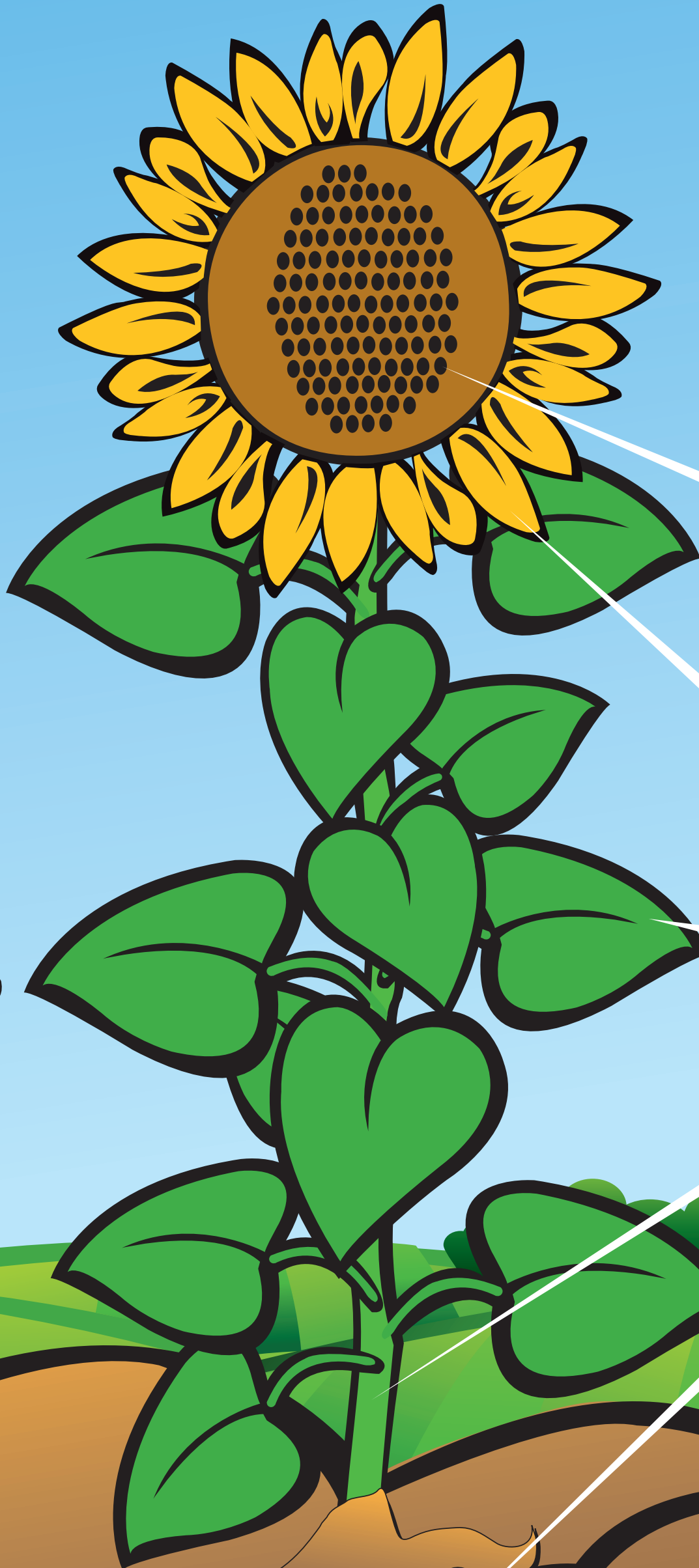




How Plants Grow

Plants are like vacuums that suck nutrients, water and air from the soil as they grow. The nutrients consumed in the largest amounts are nitrogen (N), phosphorus (P) and potassium (K). Farmers work hard to grow healthy crops to feed the world. They must replace the soil nutrients each harvest to ensure the new plants have the proper food to grow healthy and strong.



Seeds

Petals

Leaves

Stem

Roots

Phosphorus (P) helps plants catch energy from the sun.

Nitrogen (N) keeps plants healthy and green.



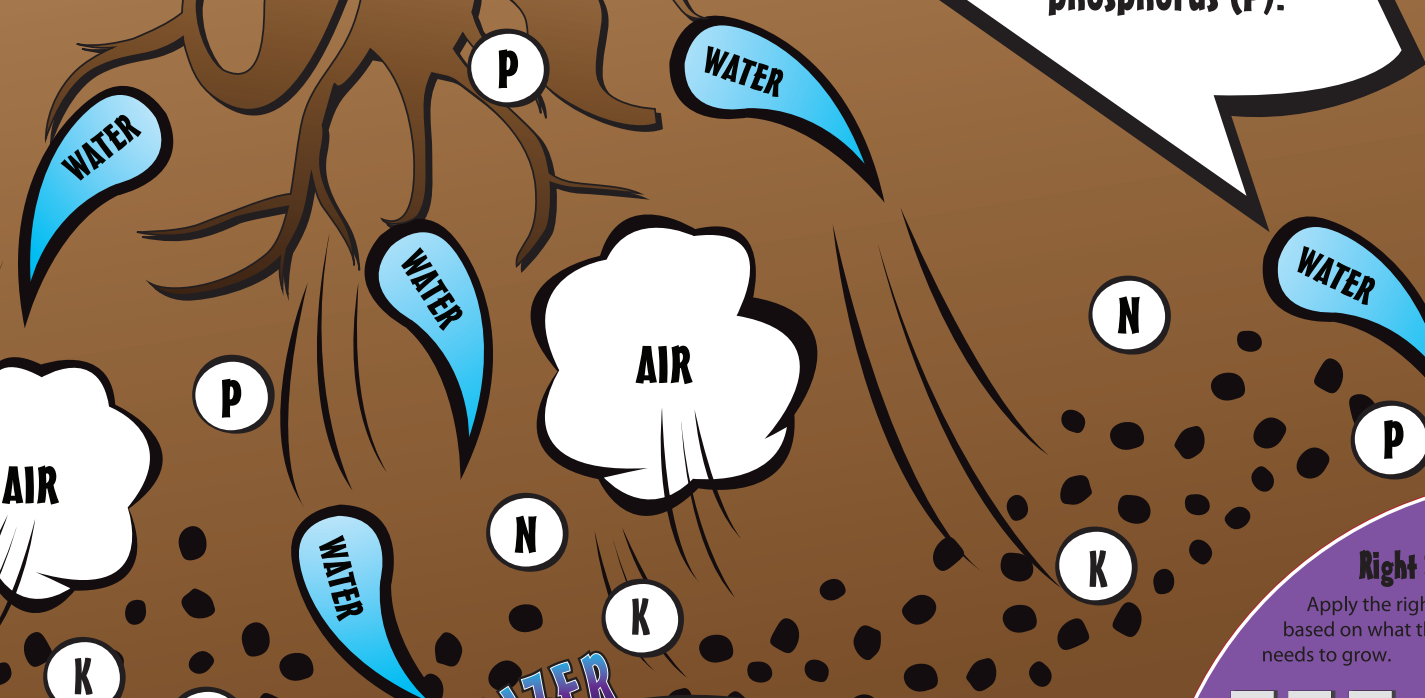
Potassium (K) keeps plants from wilting.

Potassium (K) protects plants from disease and helps provide stem strength.



Nitrogen (N) makes plants strong.

Healthy roots need phosphorus (P).



FERTILIZER N NITROGEN
Comes From The Air

FERTILIZER P PHOSPHORUS
Comes From Ancient Sea-Life

FERTILIZER K POTASSIUM
Comes From Evaporated Oceans

The 4 R's
A farmer follows 4 R's when applying nutrients:

- Right Source:** Apply the right nutrients based on what the crop needs to grow.
- Right Time:** Apply nutrients when the crop needs it – as the crop starts to grow and after it is harvested to replenish the soil.
- Right Rate:** Apply the correct amount of nutrients that the crop needs to grow - not too much, not too little.
- Right Place:** Apply nutrients in the right place so more nutrients are used by the crop and soils, and less are lost to the environment.