



The Incredible Cactus

Thick Skins

- Water storage: Cacti have thick, fleshy stems that store water, allowing them to survive in hot and dry environments.





Saguaro Cactus

- Saguaro flowers bloom typically at dusk and remain open till about midmorning the next day. By the afternoon the flower will start to wilt, and that's it for that bloom.





- Saguaros blooming. A single saguaro can produce as much as 100 flowers in a season.



It Gets Help

- The saguaro flower relies on a number of desert dwellers to help with the pollination process — this includes bees, moths, hummingbirds and white-winged doves. As these creatures get nectar from the bloom they become covered in pollen, which is then transported and deposited into other flowers.



Working Together



- Lesser long-nosed bats and saguaro flowers have co-evolved together — making them a match in pollination heaven. The night blooming schedule of these beautiful buds is an ideal time for bats, who use their brush-tipped tongues to extract large quantities of nectar from the flower. The bright white visibility of these flowers also makes it easy for the bat to spot as they move along the dark desert sky.

Animals Enjoying the Saguaro

- Saguaro flowers are often describe as having a pungently sweet melon scent. Bats and other wildlife can't get enough.



Cactus Fruit

- Once a saguaro flower has been pollinated, it matures into fruit that splits open when ripened - revealing bright red pulp. Each piece of fruit contains about 200 small black seeds.





The boiled mixture of water and Saguaro fruit is strained through a dish cloth to clear away debris and seeds.

Ron Medvescek / Arizona Daily Star

Are they in NM?

- No, saguaros are not typically found in New Mexico, but there is one at the Sierra Grande Lodge in Truth or Consequences.



The Truth Behind the Saguaro Saga

The saguaro stands proudly outside the Sierra Grande Lodge, in Truth or Consequences.



Spiny Protection

Cacti spines are modified leaves that help prevent water loss and protect against herbivores

Skin Irritant



Some cacti, particularly those in the Euphorbia genus, produce a milky sap that's toxic and can irritate the skin.



Pencil Cactus

- The pencil cactus (*Euphorbia tirucalli*) is a common example of a plant that produces a large amount of latex.



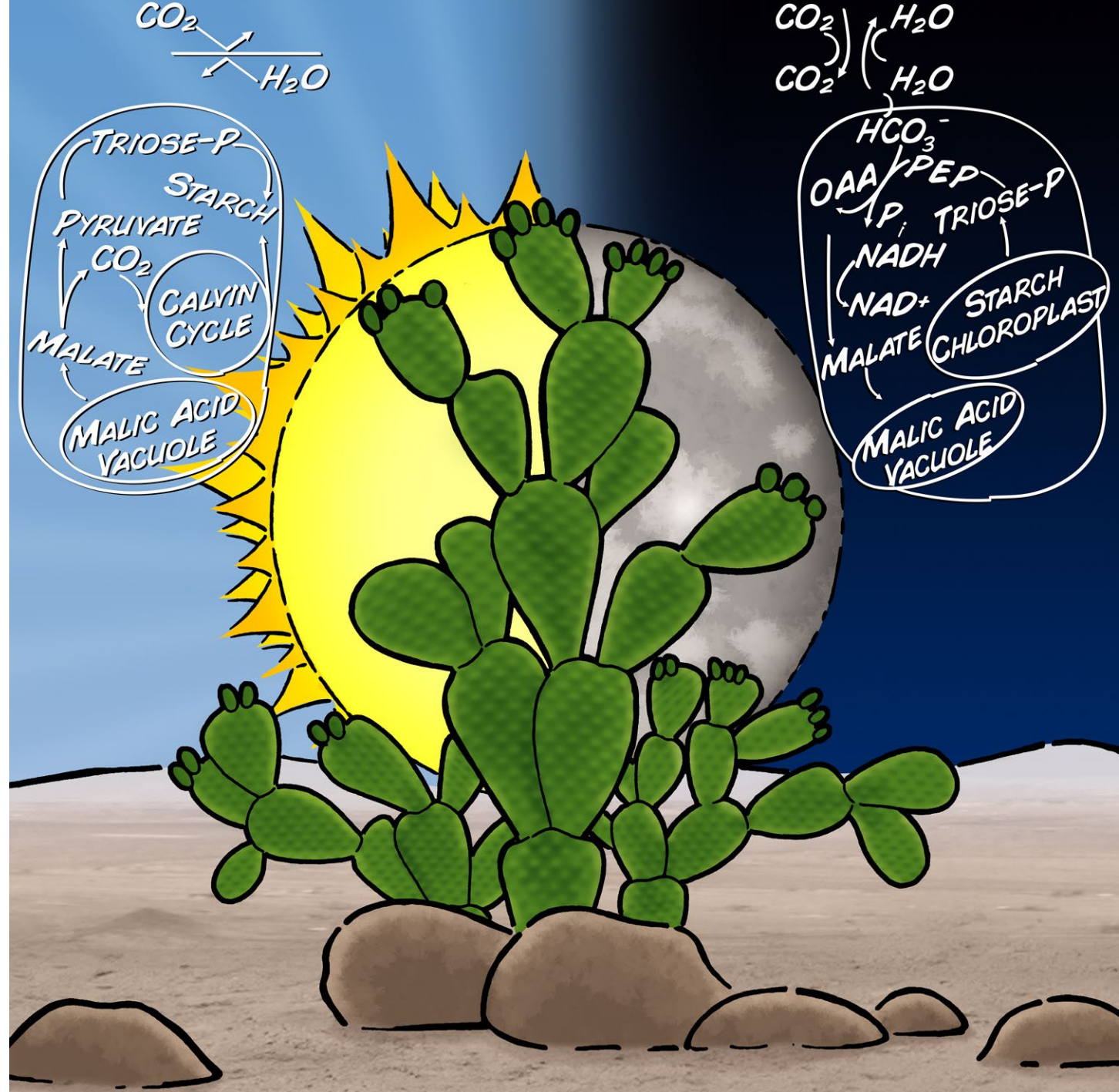


Cotton Like Fibers

- Some cacti, like the cholla and prickly pear, have a white substance that looks like cotton fibers, but is actually a wax produced by scale insects.

Photosynthesis

- One of the most interesting cactus facts is their unique method of photosynthesis called CAM (Crassulacean Acid Metabolism). This process allows cacti to open their stomata at night instead of during the day, reducing water loss in arid climates.



2

The leaves take in carbon dioxide from the air and release oxygen.

Carbon dioxide

Oxygen

Sunlight

3

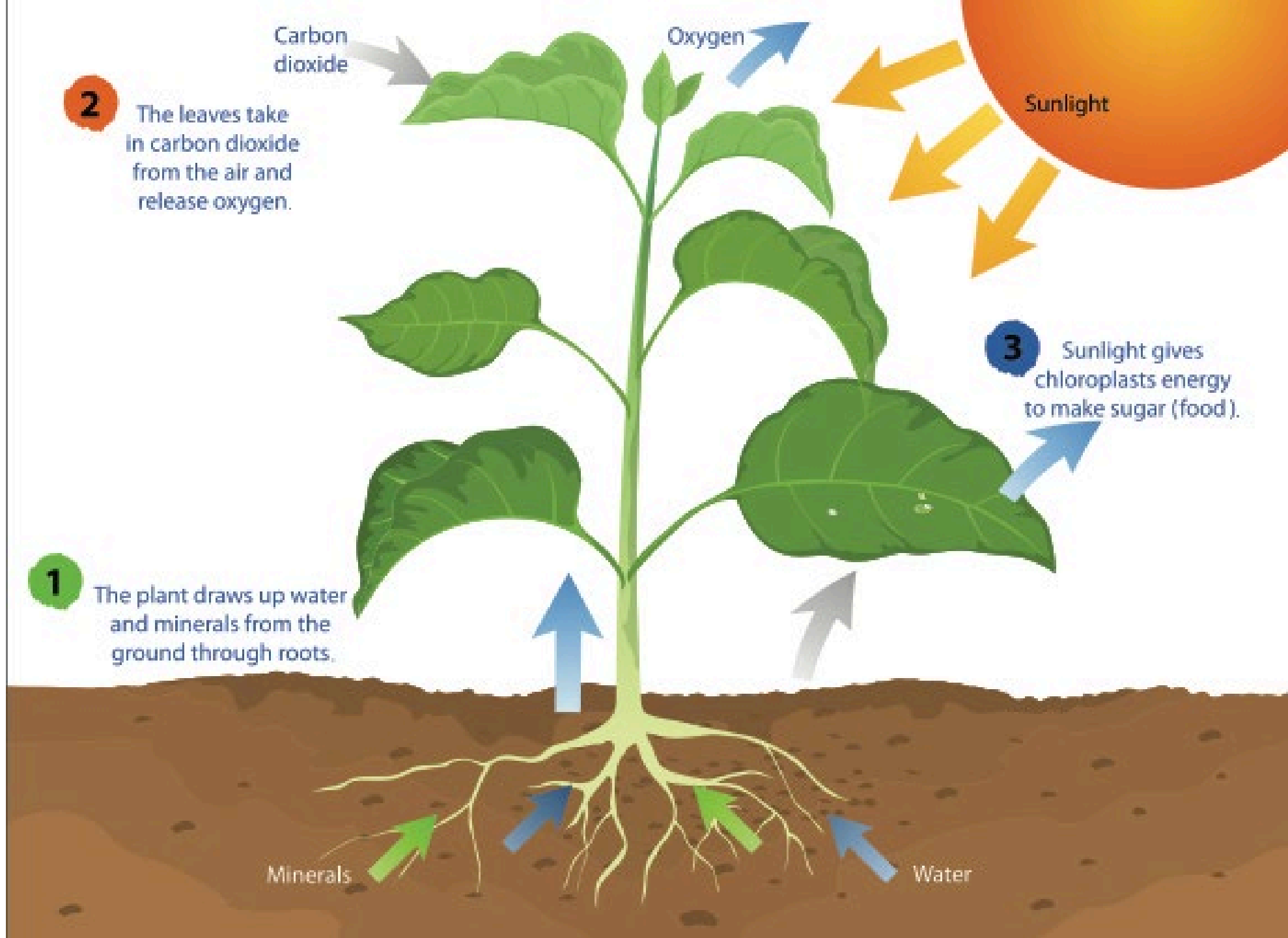
Sunlight gives chloroplasts energy to make sugar (food).

1

The plant draws up water and minerals from the ground through roots.

Minerals

Water



Dormant in the Winter

- Cacti enter a dormant phase in the winter to conserve energy and protect themselves from the cold.



Health benefits:
Cacti contain
vitamins,
pigments, and
fibers that may
help with weight
management,
diabetes, and
cardiometabolic
health.

Nopales



Rain from a Cactus?

- Cactus rain: A rare phenomenon that occurs when mature cacti release their segments during drought or stress.



Native to the Americas

- Native to the Americas: Cacti are a type of succulent plant that are native to the Americas.



A photograph of a diverse collection of cacti and succulents arranged in a terrarium-like setting. The plants are of various shapes and colors, including green, yellow, orange, and red. They are surrounded by light-colored rocks and gravel. A green text box is overlaid on the right side of the image, and a red text box is overlaid on the bottom left.

20 Basic Varieties

- **Variety:** There are about 20 genera with some 1200 species and many hybrids found in the world.

Can you Drink Cactus Water?

- Yes, you can drink "cactus water" if it is made from the fruit of a prickly pear cactus, as this is the main exception where the cactus flesh is considered safe to consume; however, most other cactus species contain toxic acids and alkaloids that can make you sick if you try to drink their water.



Even with prickly pear, consuming large quantities could cause digestive issues like diarrhea due to its laxative effect.