

Seedy

Dispersal and structure of seeds



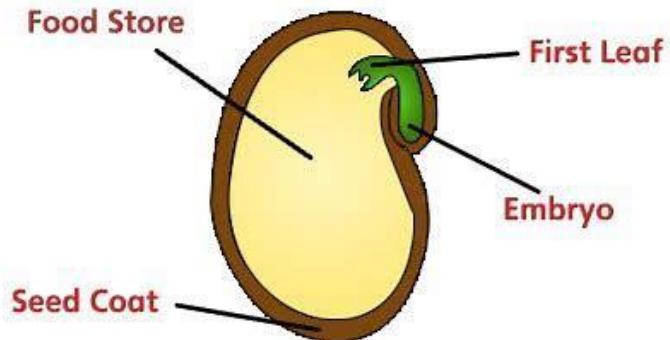
The parts of a seed

Fruits are the mature ripened ovaries of flowers, and fruits contain seeds.

Seeds are the embryonic stage of the plant life cycle, consisting of embryo (a tiny plant with a root, stem and leaf), endosperm (nutrition consisting of starch, oil and protein), and seed coat (protective covering).

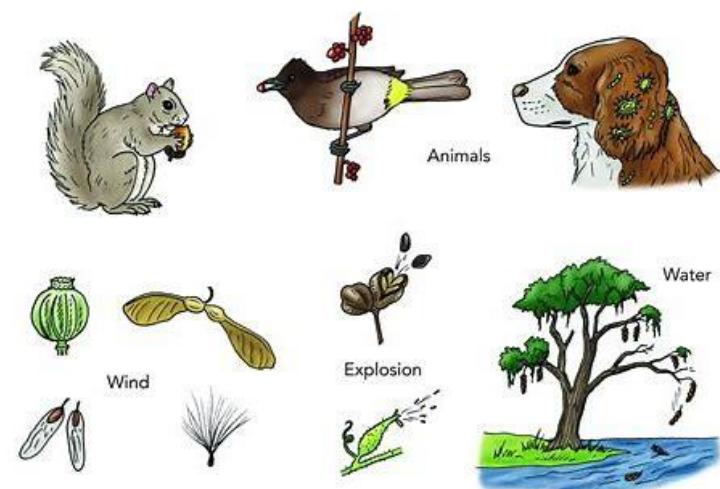
Seeds are a feature of the spermatophytes,--seed plants subdivided into gymnosperms, or “naked-seeded” plants such as conifers and cycads, and angiosperms, flowering plants with seeds enclosed in ovaries.

Parts Of Seed



The different kinds of seeds

Seed shape or form is determined by the means of dispersal with seeds that float in the water or air, are eaten by birds and animals and eliminated, or hidden by animals. Some seeds twist and pop or explode to scatter.



Seed
form is
adapted
for
traveling
in
different
ways:

Hitchhike sticking to fur or clothes	Exploding into the air	Uncurling and catapulting into the air
Drifting on the water to wash onto shore and claimed for food	Dragged underground by burrowing creatures	Rolled by beetles
Sinking into the water and sprouting in the mud	Hidden and forgotten by birds or squirrels	Floating to shore
Spit out by a creature eating the fruit around it	Scattered by rodents	Carried away with raptors
Falling from talons	Parachuting through the air	Plunging through the water to the mud
Helicoptering	Plopping in poop	

Some ways seeds travel

Seeds can travel by air—wafted, popped or exploded!



Seeds can fall into water and float to a new location.



Squirrel hiding nut.

Seeds can travel with and on animals.



Seeds can be eaten
and “pooped” out!

Birds can crack seeds and drop them.



Finding and identifying seeds and fruit

Crime scene:

- Graveyard—soil bank
- Skelton—dry seeds on the stems
- Scat and crop
- Dehiscent—exploders
- Indehiscent—containers
- Zochory—travelers

Fruit evidence:

- Beans, pods
- Husked nuts
- Achene, grain

Structural evidence:

- Pincushion head
- Square stem
- Papery sheath

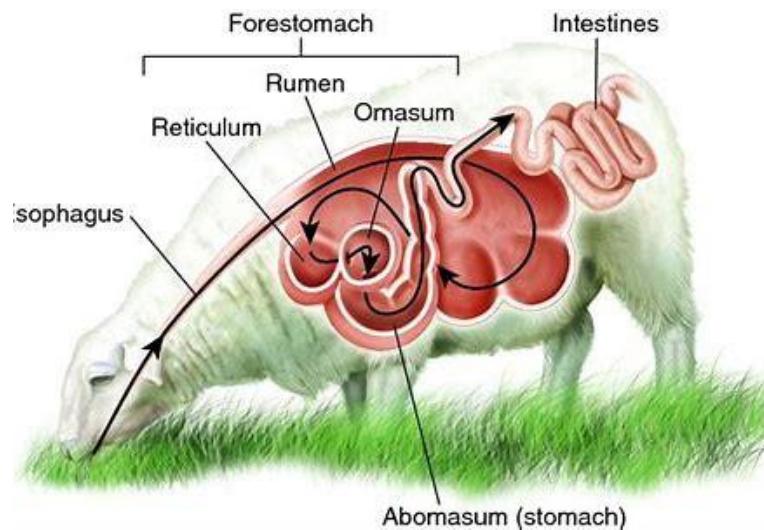
The *three sisters*- corn, beans, squash

The Three Sisters-- maize, beans, and squash-- are planted together in a shared space. This indigenous agricultural practice of intercropping allow these three plants to protect and nourish each other as they grow, to provide a solid diet for their cultivators.



Herbivores we see in the park

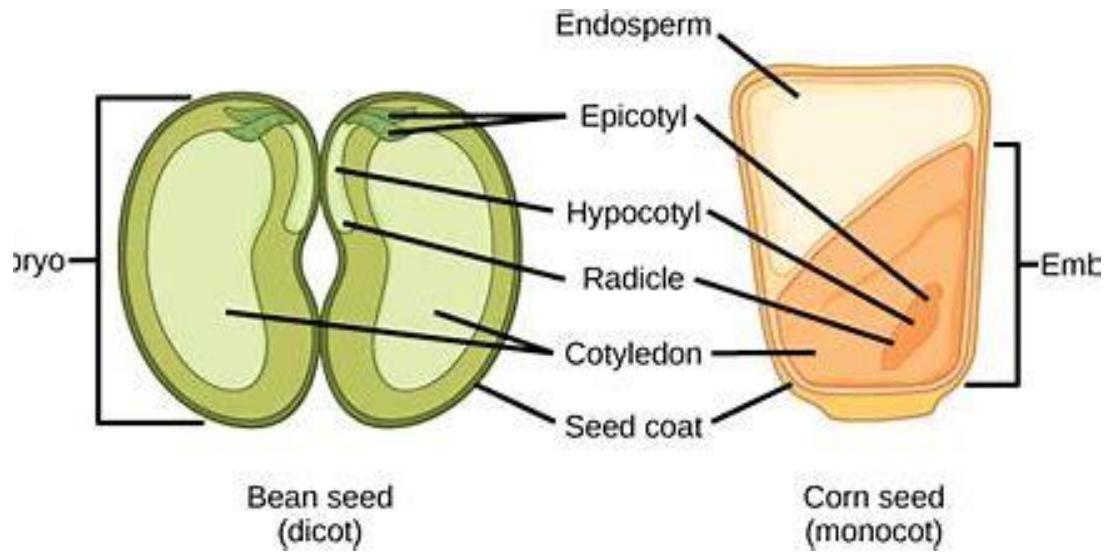
Herbivores are heterotrophs—they cannot produce food energy but are primary consumers of plant energy from primary producers. Herbivores include microorganisms, invertebrates such as insects , vertebrates such as birds, reptiles, amphibians, fish and mammals.



Finger seeds

Flower to fruit and fruit to seed, (open hand to fist, to fingers)

Provides the food and protection I need!
(rubbing tummy and hugging chest)



Singing seeds, to Clementine

Seeds are carried by the water, (wavy hands)

Seeds are carried by the birds, (flapping wings)

Seeds are carried by the wind, and (blowing)

They are carried by the herds! (stomping feet)



Seed exploration, imagineering and culinary adventures!

Be a seed detective and see how many seeds you can find on plants, on the ground, on water.

See you know you eat seeds? You probably have seeds around the house—popcorn, rice, oatmeal, peanuts, dry beans—how can you use these to be a seedoriffic artist!

And how about other seed foods—breads, pasta, cookies, cereal—what's on you seed menu?



Seeds on the move!

