

Seeds and Seedlings - Review and Discussion



Two months ago we planted seeds. Isn't it amazing how big plants can come from something so small?

Last week we potted up our seedlings. Everyone took home a tomato plant AND either a corky-stem passionflower (*Passiflora suberosa*) or a Bahama cassia (*Cassia bahamensis*). The tomato plants could grow up to make delicious fruit for people to eat, and the other plants are great "butterfly plants", attracting butterflies who will lay their eggs on the plants so their caterpillars can eat them to become butterflies. Maybe you can grow these into big plants in pots, or in the ground!

Root View boxes can be made easily using cardboard milk or juice cartons. Cut a window in the side of a carton, and line it with overhead acetate (clear film). Fill the pot with soil, and plant seeds close to the side. Cover the window with black paper (or make a door with the window you cut out), and remove the cover to view roots.

We planted seeds in several Root View boxes. In the upright boxes we planted carrot seeds; in the sideways box we planted radishes. Every student scattered several seeds in each container, so there were many, many seeds in each one.



- 1) If there are 30 students in our class, and each student added one seed to the box, how many seeds are in the box? _____
- 2) If each of the 30 students planted 2 seeds, how many seeds are in the box? _____ + _____ = _____
- 3) How about 3 seeds per student? _____ + _____ + _____ = _____

You can see that there were a lot of seeds in each box, **too many** for any one seed to have all the water, space, and nutrients it needed to produce a full-sized vegetable. Farmers and gardeners need to **THIN** their crops so that plants will grow well and produce the fruit or vegetables needed.



How might we grow better carrots and radishes in the future?

Plan an experiment to discover the best growing conditions (best plant numbers) in Root View Boxes.
