

## Do plants really need soil?

## Demonstration/Activity Mission 3

Keep for reference

<http://www.donnasday.com/donna/creativefun/activities/hydroponics.shtml>

Here are some tips on growing vegetables and flowers using hydroponics:

1. You can use any clean container that will hold at least six inches of water.
2. It is important to use a fertilizer made especially for hydroponics. Add one teaspoon of fertilizer per gallon of water. Hydroponics fertilizers are available at garden stores, some hardware stores, and nurseries, or you can go on line to a Hydroponics Garden website.
3. Start seeds in floral oasis that will soak and absorb water. Peat pots are an alternative that you can use. Follow the directions on the seed package to determine how deep and how far apart you should plant your seeds. Examples: lettuce seeds should be barely covered, and they should be planted at least 4 inches apart. Most flower seeds can be planted closer together.
4. Insert the pods containing the seeds into a sheet of styrofoam that has holes cut out just large enough to hold the pods. Make sure the styrofoam goes from edge to edge of your container so that no light can get in.
5. Light is critical to growing the plants on top. However, the roots need complete darkness. If your container is not dark, algae will bloom and it will consume all the nutrients that should be feeding your plant. Cover the sides of your container with cardboard or aluminum foil or any other material that will block out all light.
6. Constantly check the level of the water, because it will evaporate. Keep it consistent at a minimum of 6 inches.
7. Plants grown with hydroponics can be successfully transplanted outdoors, provided the climate is right. Consult your seed package to know when the right time of year is to transplant.
8. It is always fun to stagger the planting of lettuces and other vegetables, so that you always have a fresh supply. Plant new seeds every 3-4 weeks regularly, and you will enjoy fresh salads all through the winter months!