**Workshop Title (time length of class)**

**Plant Propagation from Offsets - Lesson Plan Template**

**Purpose**

* Experience gardening as a way to reduce stress, improve mood, increase physical activity, enhance social connections, and support a healthy diet

**Description**

* Provide a sensory experience using plant and soil materials. Teach plant propagation by stem cuttings. Develop fine motor skills and discernment by touch. Learn to accommodate another person using common space and supplies.
* Practice planting and caring for plants.

**Classroom setup** (allow 45 minutes)

* Insert instructions and special room set up needs here. Estimate how many people teach task will need and how much time it will take.
* Examples: Arrange tables, plants, soil, and other materials
* Plants in accessible location
* Sign-in sheet near entryway
* Evaluation sheets, pens, handouts handy so they can be distributed at end of workshop (give people handout when they give you evaluation)

**Materials**

* List materials you need to complete the activity:
  + 5 flats without holes
  + Plants that can propagate from offsets
  + Soilless potting mix
  + Scoops or small paper cups to transfer soil
  + Permanent markers
  + Snips or knife
  + Plant labels
  + Pots and Saucers

**Procedure**

* Show sample of finished plant.
* Present plant options, identify them by name. Point out the different parts of the plant: the stem, the nodes, the growing point. Have each participant feel each part of the plant as you discuss. Describe the process of taking an offset and how roots develop from the scar or leaf nodes on stem.
* Place dry soilless potting mix on trays; one tray and one spray bottle per every few participants. (This can be done ahead of time.)
* Add warm water with spray bottle. Mix with hands until potting mix is moistened but not soaking. The mix should become dark brown and hold together when squeezed. Participants will need to work together to accomplish this step.
* Fill pot with soil mix to 1/2 inch from the top.
* Make offsets by separating the ‘pup’ from the mother plant. Help participants as needed to find this spot correctly by feel. Cut with a pair of scissors or knife. 2-3 offsets per participant.
  1. Ideally, do this 3-4 days before you are ready to plant each offset. Allowing the scar to dry after being cut or separated. This point is where new leaves emerge from the stem.
* Make two or three holes in soil by pushing an index finger into soil until the tip of the index finger is about an inch from reaching the bottom of the pot.
* Place offset stems in holes. Firm them in place. Fill in the holes around the cuttings with soil. Water the stem cuttings with a spray bottle so the potting mix settles next to the stem.
* Participants write their names or plant names on plant tags with sharpie markers.

**Wrap-up – (time needed)**

* Thank everyone
* Pass out (and collect) evaluations
* Pass out handouts

**Cleanup**

Key Information:

* San Diego’s seasons: Cool season (winter & spring, Nov – Apr) and warm season (summer & fall, May – Oct)
* Explain propagating plants from cuttings, off shoots, or leaves, watering, harvesting while engaged in the activity.
* For a sensory experience, choose scented geranium varieties.

Key Information:

* Offsets are short, lateral shoots, bearing clustered leaves at the tips, and are capable of taking root as plant daughters when separated from the parent plant.
* Offsets remain connected to the parent plant but often fall to the ground naturally, where they root and form a completely new plant.
* Plant offsets are propagated by either cutting the offset off the mother plant with a sharp, sterile knife; or by gentle separation, generally accomplished by slowly working the offset back and forth until it separates from the plant.
* Offsets should not be planted immediately after separation as the wounds caused during the separation could introduce bacteria or viruses that could kill them. (1)
* Plant ideas:
  + Tropical plants: Cordyline, Chrysalidocarpus lutescens, Dracaena surculosa, Pandanus veitchii, Rhapis excelsam Sansevieria
  + Cacti/Succulents: Agave, Aloe, Gasteria spp., Haworthia, Sansevieria
  + Bromeliads: Aechmea, Billbergia, Cryptanthus, Guzmania, Neoregelia, Nidularium, Tillandsia, Vriesea

References:

* 1. <http://plantpropagation.com/plantoffsets.htm>