

LESSON #2: Types of Gardens/ 'Garden Kits'

OVERVIEW:

The purpose of this lesson is to identify different garden types that could be considered in a school garden. Suggested are:

- *Indoor*
 - *Classroom Garden*
- *Sun*
 - *Pollinator*
 - *Three Sisters*
 - *Vegetables*
- *Shade*
 - *Shade Vegetables*
- *Swale*
 - *Wet or dry swale or rain garden*
- *Trees*
 - *Fruit*
 - *Native*
- *Visit Local Gardens*
 - *Parks*
 - *Community Gardens*

SUB-QUESTION(S):

- How can we take the two-dimensional drawing of our site and improve it?
- Can we re-purpose human-built areas such as asphalt (black-top) and concrete sidewalks or other paved areas?
- Can we use alternative porous and reflective materials to keep our site cooler and retain water resources?
- How many and which garden types can we consider for our site?

WAYS OF KNOWING URBAN ECOLOGY:*Students will...*

<u>Understand</u>	. Identify the different types of gardens possible
<u>Talk</u>	. Discuss the pros and cons and challenges of each type
<u>Do</u>	. Create an updated two-dimensional map identifying the proposed gardens
<u>Act</u>	. Discuss the possibilities with school officials and determine whether a garden(s) can be put in on the site

SAFETY GUIDELINES:

Review field safety guidelines when taking students outside to do any site visit.

PREPARATION:

Time: 2 class periods

MATERIALS (enough for # groups @ 4 in each group):

A writing implement will be needed for both activities (pencils preferred).

In addition:

Activity 2.1 – Garden Types

- PowerPoint to review garden types around the world and in Southern California area
- Projector to show PowerPoint presentation
- Devices for students (in pairs to conduct on-line research)
- M10_L2_A1_Student Handout: “Types of Gardens Research”

Activity 2.2 – 2D Drawing Assessment - Initial

- M10_L2_A2_Student Handout: “Garden Planning”
- Clipboards

INSTRUCTIONAL SEQUENCE:**Activity 2.1 (1 class period) – (Building Background / Researching Gardens):****Step 1: Activator / Warm-up**

- Using a K-W-L chart on a flip-chart paper or white board, chart students' answers to the questions below:
 - Ask students what they know (K) about gardens
 - Ask students what they want to learn about gardens (W)

Step 2: Build Background - Show 'Garden Types' PowerPoint**Step 3: Students Conduct Research**

- Have students conduct research on the types of gardens that could be put in at the school site, such as edible and/or native gardens
- A sample graphic organizer is provided, as a sample for this activity
- See Student Handout, M10_L2_A1

Step 4: Students Present Findings

- Using the K-W-L chart, chart students' answers to the question below:
 - Ask students what they learned (L) about gardens
- Using a different flip chart paper, chart students' feedback on the type of garden(s) they would like to propose being planted and why

Activity 2.2 (1 class period) – (2D Drawing Assessment):**Step 1: Activator / Warm-up**

- Review with students what the student feedback was on the proposed garden(s) for the site
- Tell students the group will be going outside to take another look at the site, taking with them their graphic organizer for this Activity 2, to write more details, and draw a detailed sketch of their proposed garden(s).
- See Student Handout, M10_L2_A2.

Step 2: Take it Outside (after reviewing Safety Guidelines)

- Have students sketch their proposed garden(s)
- Don't forget clipboards!

Step 3: Wrap-Up – Take it Back Inside – Exit Ticket or Journal Entry

- Compliment students on their great field work
- Have students share their ideas about an ideal garden
- Have students write on an Exit Slip the type of garden they recommended and why; OR have students make an entry in their science journal

Summary Notes / Conclusion: By the end of this Lesson 2, students should be able to (SWBAT):

- Conduct research
- Describe and Compare the various Garden Types
- Make Recommendations for suitable gardens for a site improvement
- Draw a 2D site map
- Communicate findings

Lesson Standards Alignment (CA-NGSS) (see attached).

Lesson Adaptations and Extensions (see attached).