**Lesson Name:** Planning for an Order

**Main message:** In planning for an order, you need to think about yield and days to maturity as you plan your planting dates and quantity of bed feet you will plant.

**Time:** 30-45 minutes

**Location (classroom/field):** Classroom

**Audience (Level):** Intermediate

**Literacy/Numeracy level:**

**Area of learning/Subject:** Crop Planning, Succession Planning

**Competencies/Skills/Core Knowledge:**

Crop planning

Yield estimation

Reading a calendar

Counting weeks and/or days

Measuring with a measuring tape

Fractions—estimating ¼ and ½ bed

Familiarity with yield estimation chart (review of what LBs means)

**Related activities:**

**Learning objectives**

***By the end of the lesson farmers will…*:**

* understand how to work backwards to plan for an order
* practice skills in using the concepts *days to maturity* and succession planting
* become familiar with the concept of harvest windows

**Assessment evidence**

***Farmers will demonstrate their learning by…*:**

Have each student run through steps #2 – 7 to assess for understanding. Assist the farmers as necessary or have the students work in pairs if they are uncertain or shy.

**Pre-teaching Concepts:**

**ESL words of the Lesson:**

**Teaching Tips:**

The chart for yield per 100 foot row/ 25 foot row and 25 foot bed needs to be completed and used as a reference during this activity. Students probably won’t memorize the yield per bed, but they need to know that such a table exists and that they can use it to plan for their markets.

\*For Cville New Roots, one way we do succession planting is that we plant across farmers, rather than one farmer doing succession. Make sure to point this out, so that one farmer may plant 1 bed and then two weeks later another farmer will plant 1 bed, rather than one farmer planting ¼ bed and then later planting ¼ bed etc.

**Background Notes/Reference Materials/Supporting Documents:**

**Materials:**

* Measuring tape
* Making tape (or blue painter’s tape)
* Colored markers
* Calendar (BIG as possible) Teaching Tip *IRC Cville uses a 2X4’ whiteboard calendar*
* 25’ hallway or classroom space
* White board and marker
* Completed Veggies Yield Value Worksheet to use as a resource
* Information on harvest windows and days to maturity for the example crops. (Create a crop information sheet for 4 example crops that includes the DTM and harvest window period)

**Set-up:**

Mark the 25’ bed on the floor using masking tape. Mount the calendar (showing multiple months at a time) so it can be seen and annotated by students.

**Steps:**

Preteaching*—*

*Understanding of Days to Maturity (Review Discussion or Seasons on a Clothesline activity)*

1. Ask students what days to maturity means and write it on the board
2. Talk about which crops have long days to maturity, and which have short days to maturity
3. Categorize some of those crops on the whiteboard and write their DTM number next to them.

*Harvest Windows (Discussion or Harvest Windows activity)*

What is a harvest window? It is the time that you can harvest crops

Activity

1. Identify the first student (preferably your most advanced student) to act as a farmer and receive an order. If there are nervous students in the class, have the students work in pairs.
2. Tell the students you are the customer. Acting as the customer, provide the farmer with an order: crop, amount wanted, date wanted. Put the order details up on the whiteboard using as many familiar symbols as possible.
	1. *Example: 1 lb. cilantro on June 1st.*
3. Have the farmer circle the date on the calendar that the customer would like the produce.
4. Work with the farmer in front of the class to use the yield estimation table to estimate the amount of row feet required to fulfill the quantity requested in the order.
5. Have the farmer mark on the floor how many feet they would have the plant of this crop in their 25” bed.
6. Work with the farmer and the rest of the students to identify the days to maturity and harvest window of this specific crop on the crop information sheet.
7. Lead the class in counting back the days from the circled date on the calendar to the ideal planting date. Have the farmer circle the planting date.
8. Give the example of an order being requested for 4 weeks in a row
9. Work with the farmer out loud to plant any extra bed feet needed for successional plantings.
10. Repeat steps 2 – 7 for additional crops for each student.

**Alternatives**

* For a less advanced group, this activity can be done just focusing on dates, not quantities. Students will go through the steps of counting back on the calendar and planting at different times of succession, but don’t have to estimate yield.
* For additional information, talk about what kind of soil prep or seedling preparation needs to happen with this specific crop, and dates associated with those.
* For a more advanced group you can introduce concepts like crops that are cut and come again, vs those that are one-time harvests.

**Reflection *What did farmers learn? How do I know? What did I learn? How will I improve my lesson next time?*:**

**Participant Evaluation**

How much did you like this activity?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** |
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| **Comments:** |  |  |  |  |

Did you feel like you learned something?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** |
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| **Comments:** |  |  |  |  |

**Accompanying Photos:**