**Lesson Name:** “A Season on a Clothesline”

**Main message:** Different crops take a different amount of time to reach maturity.

**Time:** 45 minutes

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

**Audience (Level):** Beginning, Intermediate

**Literacy/Numeracy level:** No literacy necessary

**Area of learning/Subject:** Production, Crop Planning, Seasons

**Competencies/Skills/Core Knowledge:**

* Describing what happens during seasons (frost dates, etc)
* Planting at the correct season
* Knowing English names of crops

**Related activities:**

Creating a planting/harvest chart

Pin the tail on the season

**Learning objectives**

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

* practice knowing and saying the months of the year
* be introduced to the representation and use of a timeline
* be introduced to the concept/term “Days to Maturity”
* learn what “last frost date” and “first frost date” means
* see that some crops are long season crops and take a long time to be ready for harvest and others are short season crops and take a shorter amount of time to be ready for harvest

**Assessment evidence**

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

* Participating in discussion
* Volunteering/pinning items on the timeline where they go

**Pre-teaching Concepts:**

Representing time with a timeline

Days to Maturity

**ESL words of the Lesson:**

Months of the year

Days to Maturity

**Teaching Tips:**

Depending on how many things will be pinned to the clothesline, make sure there is strong enough tape (if taped to the wall).

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

If using other crops than those listed, you will need their DTM

**Materials:**

* String
* Clothespins
* Images representing First Frost and Last Frost
* Cards with each Month Name written on them
* Vegetable images, including vegetables with very varied Days to Maturity

**Set-up:**

* Make sure that all materials are well-organized for quick use during the progression of the class
* If not using volunteers to hold the timeline, tape the timeline to a wall.

**Steps:**

*Preteaching*

Using a Timeline

* What is a timeline? A timeline is a line that is used to show different points at time.
* The beginning of the time is on the left. As you move to the right, time passes. Something that happens here happens after something that happens here.
* A timeline can represent one month, a year, 10 years, any amount of time you want.

Days to Maturity

* What does “Days to maturity mean?” Write on board. This is how many days it takes for a plant to reach maturity and create fruit.
* Some crops reach maturity very quickly. What are some examples?
* Some crops take a long time to reach maturity. What are some examples?
* Radishes take only 25 days to reach maturity. Peppers take 130-150 days. Ask farmers what this means. (it takes that many days from when you plant it to when you can harvest it)

**Activity with String and clothespins:**

* For our activity, this string timeline is going to represent one season
* At the beginning of your string is the planting date May 1 (or you can start it before, with a spring month).

1. Pin the month cards along the line one at a time, asking farmers to say the name of the month that comes next. “What month comes after May?”
2. Have farmers repeat the names of all the months once they are all on the line.
3. Pine last and first frost dates on the line discussing with the class what they are/mean. “Where would you put the last frost date?”; “Where is the first frost date?”
4. Place the pictures along the string with clothes pin to illustrate the different production lengths. Ask participants to help you place crops on the “timeline” for more interaction. Pretend there is only one planting date for everything and make that May 1.
   * Radish: 28 June 1
   * Mustard: 45 early June
   * Cilantro: 50-55 late june
   * Bush Beans: 50 mid June
   * Beets: 50 mid june
   * Green Onion: 65 days
   * Fennel: 80
   * Tomato: 120/130/140 mid September
   * Eggplant: 130 mid September
   * Pepper: 130/140/150 mid September

*Discussion*

What happens if you plant all your crops on May 1st?

Potential Answers or Points of Discussion:

* you might have to plant tomatoes earlier to make sure you get a good harvest.
* you might be able to get two harvests out of the radish if you plant it twice. This means that we start those things early in a greenhouse, so they are not damaged by the frost, but they get an early start and we do not have only a few weeks of harvest.

**Alternatives**

* During this activity trainers can talk about typical weather patterns during each season as well as many other seasonal characteristics
* For more advanced and literate farmers, you can link this activity with activities using seed packets and reading dates to maturity on the packet. Farmers could read the DTM on the seed packet and then give this information for each crop. This can be expanded to pinning the seed packet on the line when it would be harvested based on that date.
* The next step of this activity is to shift crops according to seasons they need (weather conditions) as opposed to planting all at the same time, and to talk about harvest windows
* For more advanced groups, and assessment opportunity, have volunteers pin some of the cards on the line (first and last frost dates, vegetable images for planting and harvest dates)

**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:**