**Lesson Name:** Plant Families: Find your Family Member

**Main message:** Plants come in families like people come in families, and share some similar characteristics

**Time:** 30-45 minutes

**Location (classroom/field):**

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

**Literacy/Numeracy level:**

**Area of learning/Subject:** Production

**Competencies/Skills/Core Knowledge:**

Knowing plant/crop families

**Related activities:**

Plant Families: Categorization

Heavy Feeders, Light Feeders

Crop Rotation Crop Map Planning Activity

**Learning objectives**

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

* Know that plants come in families with some similar characteristics
* Know 3-4 crops that are related to each other
* Understand why knowing which plants are in the same family might be important for crop planning and soil fertility management

**Assessment evidence**

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

Finding and standing with their plant family member and correct plant family

**Pre-teaching Concepts:**

**ESL words of the Lesson:**

**Teaching Tips:**

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

|  |  |  |
| --- | --- | --- |
| **Solanaceae/Nightshade**  Eggplant  Tomato  Cherry tomato  Hot Pepper  Bell Pepper  Potato | **Brassica**  Cabbage  Broccoli  Cauliflower  Brussels Sprouts  Bok Choy  Kale  Mustard Greens  Arugula  Collard Greens  Radish  Daikon | **Legume**  Green bean  Fava bean  Soy bea**n**  Peas  Peanut |
| **Cucurbits**  Pumpkin  Cucumber  Gourd  Watermelon | **Asters**  Lettuce  Sunflower  Zinnea  Marigold | **Alliums**  Chives  Onions  Garlic  Leegs |

**Materials:**

* Names of 4 vegetable families on large pieces of paper—choose those that are most relevant for your needs
* Compilation pictures of parts of the plant with statements:
  + “I have flowers that look like this”
  + “I have leaves like this”
  + “I have seed like this”
  + “I have fruit like this”—for more advanced groups, this one is very obvious, so you might want to omit it

Example: Solanaceae flower card shows a photo of tomato flower, potato flower, eggplant flower, pepper flower, and ground cherry flower (with as little foliage as possible)

Teaching Note: For the seed card, you can use photos of the seed, or paste/tape actual seeds from those plants on the card

* Pictures of the vegetables in the chart above (those in families that you are using) to hand out to farmers

**Set-up:**

* Clear space with all tables and chairs at the interior or out of the way so people can walk around
* Put the name of a plant family and example pictures and statements taped in different parts of the room (all grouped according to family)
* Write on the whiteboard the following the two sentences “What is the name of the family?” “Who are the members of this family?”

**Steps:**

*Introduction*

1. Ask a farmer to name their family members who live with them at their house. (Try to choose a farmer with a small family).
2. “This is the Rai family. Who are the members of the Rai family? Sancha, Man, Krishna, son. There are four people in the Rai family.” Write the name Rai, underlined and in capital letters on the whiteboard, and write the members of the family underneath.
3. How do we know that someone might be in the same family as someone else? Sometimes it is hard to tell, but sometimes we can tell! Describe some ways that we know that someone might be related to someone else.

* similar eyes
* similar height
* similar ways of talking
* similar interests

1. Plants are also related to each other and make up families. How do we know that plants might be related to each other?

* similar flower (example nightshade flowers)
* similar fruit type
* similar growth habit (example: vine, bush, underground)

1. Give each farmer a picture of a vegetable, making sure that there are at least 2 from each family.

“Each one of you is a different vegetable. Each of you has a family relation vegetable in the room, another vegetable related to the picture you have.”

1. Ask them to find other vegetables/people who they might be related to “Try to find your sibling or cousin in the room. Once you have found your cousin vegetable, together as a team, try to find the family name (taped to the wall) and stand near it.”
2. After everyone has grouped, look around talk to people about their plant families. Ask why they thought they were related to someone else. Point out similarities between different vegetables. If there are more than 2 then point out the large families. If people have incorrectly chosen, acknowledge why they might have thought that and been mistaken, point out how sometimes human family members don’t always resemble each other, but then move them to the appropriate place.
3. At the end, have all students repeat the name of the plant families and the names of the vegetables in that family. “What is the name of the plant family?” “Who are the members of this family?”
4. *Discussion*

Why might it be important to know what plants are related to each other?

Just like related plants have similar physical characteristics, they also might have similar nutrient needs. Pests might be attracted to one type of family.

Knowing that crops might share these two things will help you manage your whole farm better

* Rotating crops to manage soil fertility
* Rotating crops to manage pests

**Alternatives**

**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** |
|  |  |  |  |  |
| **Comments:** |  |  |  |  |

Did you feel like you learned something?

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

**Accompanying Photos:**