



# PLANT PARTS LOGIC PUZZLE

## Grade Level

3-8

## Length of Lesson

30 minutes

## Objective

By the end of this lesson, students will have a better understanding of plant parts, and which parts of plants we eat.

## Materials Needed

- Scissors
- Glue or tape
- Copies of activity sheets

## Standards

### NGSS

3-LS3-1; MS-LS2-2

## Lesson Summary

This lesson is a fun, hands-on activity designed to help students understand how the plants we eat are derived from different parts of the plants they come from.

## Suggested Sequence of Events:

1. Set Up: Print enough copies of the activity sheets that each individual or group has enough materials. Refer to the Teacher Resources page for more information.
2. Read through the IAITC Seasons Ag Mag to learn more about the different specialty crop grown here in Illinois.
3. Complete the activity following the procedures:
  - Students can work individually or in small groups of two to three depending on the ability of your students.
  - Hand out materials to each student/group, except the categories answer key worksheet.
    - The categories answer key page is optional, to be used to help with the logic puzzle if needed.
  - First, have them cut out the plant part labels and match them to the 'tagged' vegetables. Once they are confident they have them matched correctly, use glue/tape to secure the labels.
  - Next, have them cut out the vegetable cards. Have them mix up the cards and then try to fill the shopping bag grid with the squares. Each edge of the square needs to match the edge of the square adjacent to it. For instance, roots need to match with other roots, stems need to match up with other stems, etc.
  - Once they fill the board, have them remove the squares and try again!
4. Whole class discussion and reflection of activity.

**NOTE:** There are two versions of both the vegetable cards and the shopping bag worksheet, each labeled "beginner" or "advanced". Use the appropriate version for your students, or start with "beginner" and then test their ability with "advanced". The "beginner" vegetable cards *may be* used interchangeably with the "advanced" shopping bag worksheet and vice versa. Use your best judgement!

# TEACHER RESOURCES

## General Game Information:

- The categories worksheet included is optional to use. It can be used as an introduction to plant parts or to help aid them as they complete the logic puzzle.
- There are two versions of the vegetable cards. The harder version includes all the fruits and vegetables from the categories sheet. The easier version includes only one fruit/vegetable from each category.
- There are also two versions of the shopping bag puzzle board. The easier version is a 3x3 grid and the harder version is a 4x4 grid.
- Mix and match the versions of the cards and grids according to the ability of your students!

## Extension Ideas:

- Read “On the Farm, at the Market” by G. Brian Karas and talk about how commodities get to farmers markets.
- Talk about their favorite fruits and vegetables. Where are those crops grown? Are any of them grown in Illinois? Which state produces the most of those various crops?
- Invite a local specialty crop farmer who grows vegetables into your classroom to talk about growing food.
- Learn about locally grown foods and farmers markets. Challenge students to complete the AITC Farmers Market Scavenger Hunt worksheet.
  - What other commodities besides fruits and vegetables can be found at a farmers market?
- Learn more about gardening and grow vegetables or flowers in your classroom.
- Have students design their own garden. What would the dimensions be? What would they plant in their gardens?
- Learn more about pollinators and their role in agriculture.
- Go to [agintheclassroom.org](http://agintheclassroom.org) to contact your County Literacy Coordinator for free classroom sets of our Ag Mags!

## Answer Key Note:

*Correctly classifying plant parts is more complicated than it might seem. Some of the included plant parts could be classified differently. For instance, one could argue that green beans are actually a fruit instead of a seed, since we eat both the beans and the pods all together.*

*Teachers can make adjustments to how they want their students to classify these plant parts based on their own research and understanding and the lesson will still function the same.*

Cut out the plant part labels on the next page and match them to the vegetables below according to which part we eat. Each one will be used only once!

artichoke



asparagus



beet



broccoli



carrot



cauliflower



celery



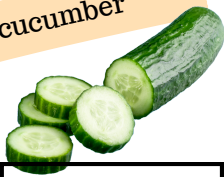
cilantro



corn



cucumber



green bean



horseradish



kale



lettuce



pea



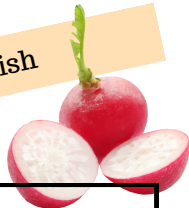
pepper



pumpkin



radish



rhubarb



spinach



tomato



wheat



Cut out these plant part labels and match them to the vegetables on the previous page according to which part we eat. Each one will be used only once!

root	stem	seed	flower
root	leaf	seed	flower
root	leaf	fruit	flower
root	leaf	fruit	seed
stem	leaf	fruit	
stem	seed	fruit	



# Categories Answer Key

## Roots



## Stems



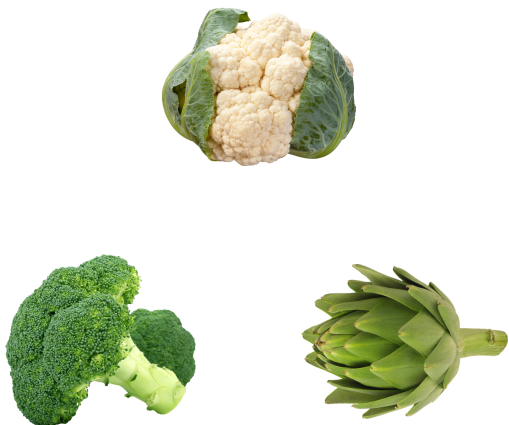
## Leaves



## Seeds



## Flowers



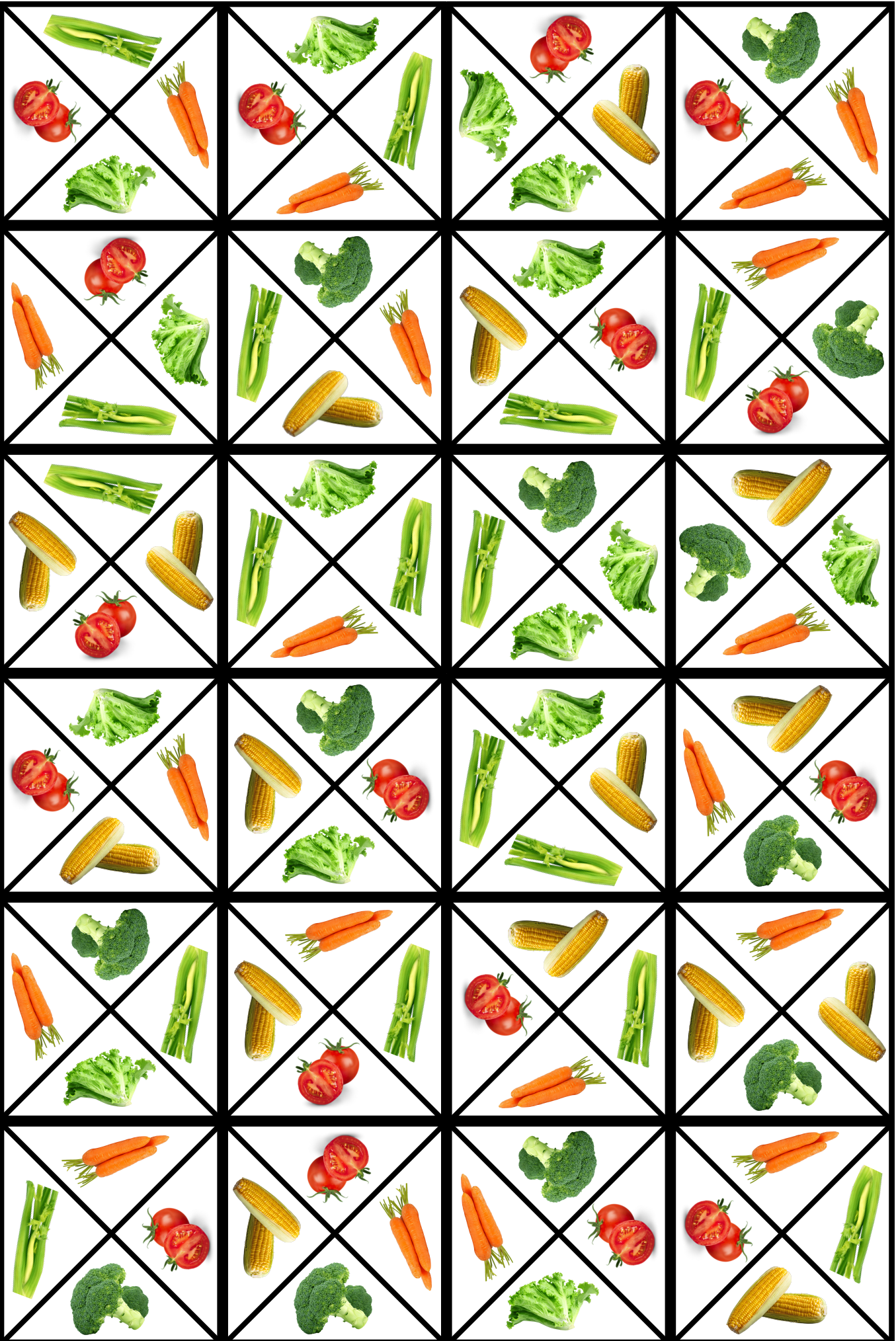
## Fruits





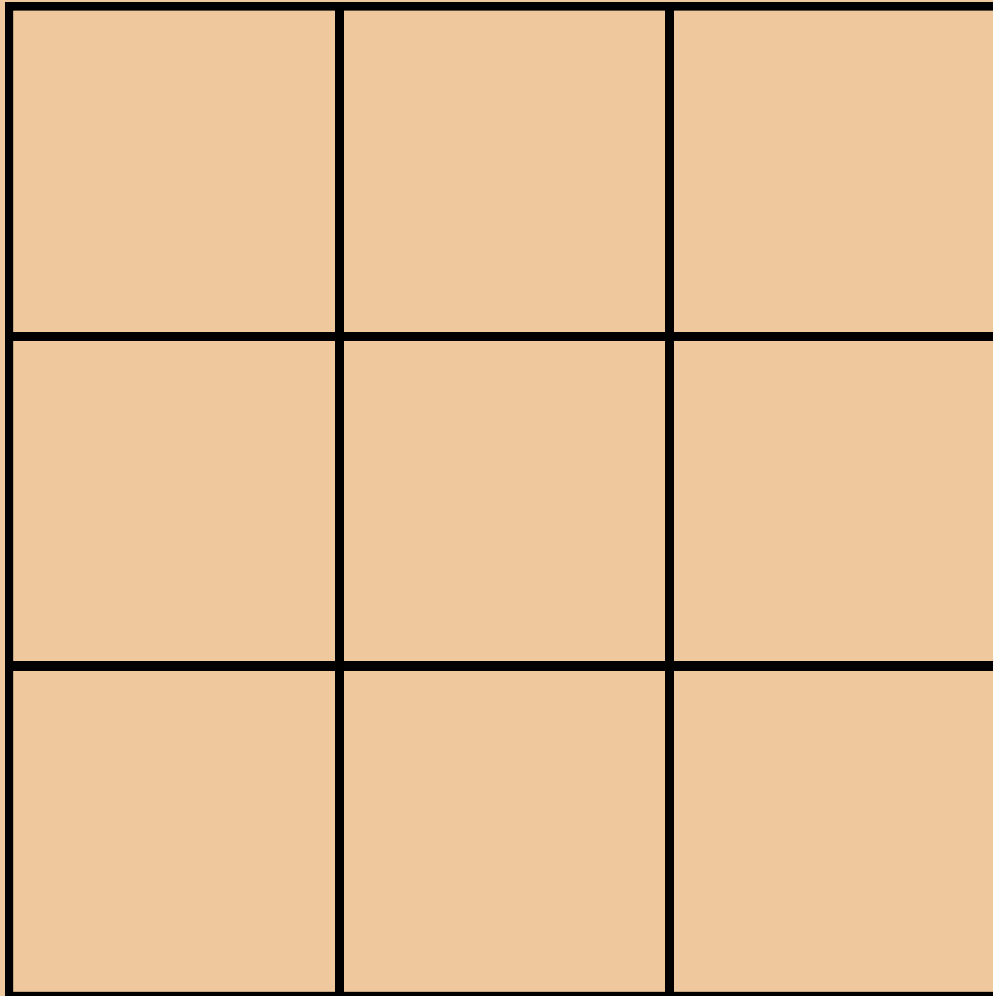
**BEGINNER**

Instructors: Cut out these Vegetable Cards along the THICK lines. You will end up with 24 square cards! These are the playing cards for the review activity.



Time to go shopping at the Farmers Market  
and put your knowledge to the test!

Arrange the Vegetable Cards into  
the shopping bag below so that  
"like" plant parts are touching each  
other (i.e. - stems touching stems,  
roots touching roots)





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