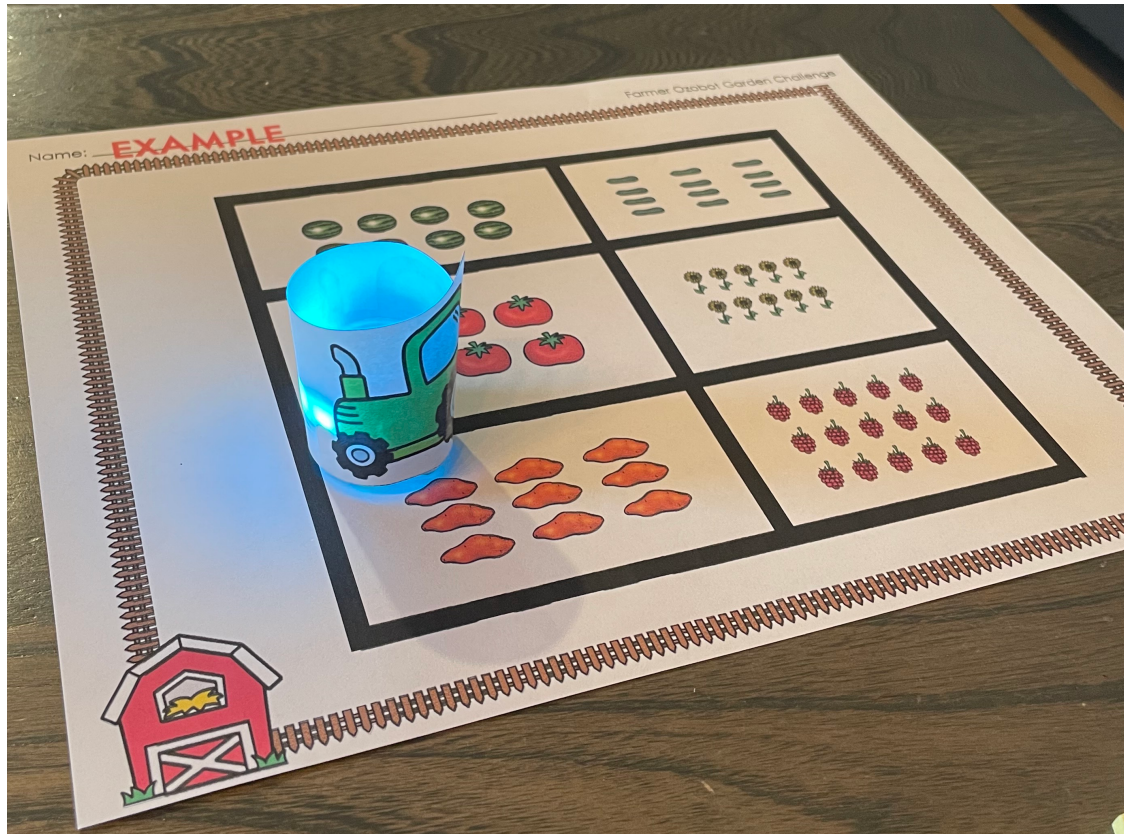


# FARMER OZOBOT GARDEN CHALLENGE

*using color codes*



Name: **EXAMPLE** Farmer Ozobot Garden Challenge

|                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
|  |  |
|  |  |

Name: **EXAMPLE** Farmer Ozobot Garden Challenge

| Crop:      | Array Size: | Total Items: |
|------------|-------------|--------------|
| watermelon | 2 x 4       | 8            |
| zucchini   | 4 x 3       | 12           |
| tomatoes   | 2 x 3       | 6            |
| sunflowers | 2 x 5       | 10           |
| potatoes   | 3 x 3       | 9            |
| berries    | 3 x 5       | 15           |
|            |             |              |
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|            |             |              |

**Crops Totals:**

I had 6 different crops.

I had 60 items in all.

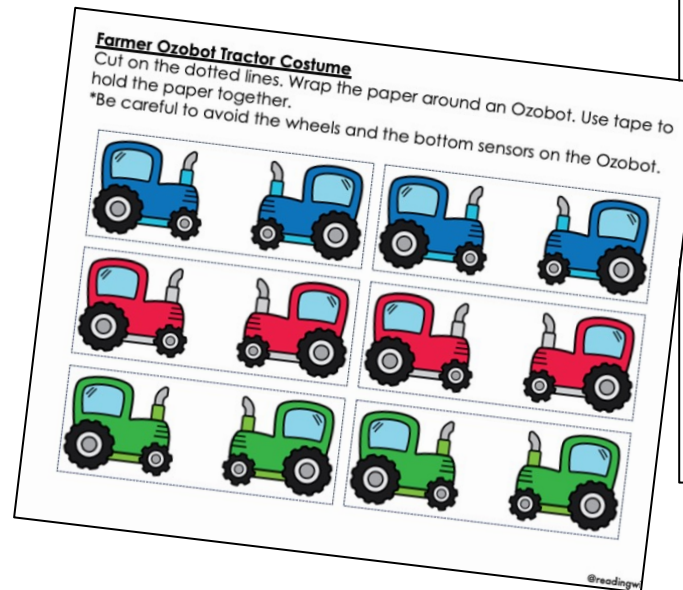
My biggest crop is berries.

My smallest crop is tomatoes.

If I made a new garden, I would change the amount of crops I planted.

 @readingwithmrsif

Use color codes  
and practice  
multiplication  
while you create  
a garden for  
Farmer Ozobot!



# FARMER OZOBOT GARDEN CHALLENGE

*using color codes*

## **The Challenge:**

Create a garden for Farmer Ozobot using multiplication arrays and pathways.

## **Supplies:**

- Garden Template (2 options)
- Crop Totals worksheet
- an Ozobot
- Color coding markers
- Other drawing / coloring materials
- Farmer Ozobot tractor costume (optional)

## **Steps:**

- Choose the crops Farmer Ozobot will plant in the garden. All crops must be arranged in an array.
- Plan your garden layout. Farmer Ozobot must be able to go around each crop so it can take care of the garden.
- Draw each crop in a multiplication array.
- Draw the solid black lines for Farmer Ozobot to travel. You can add color codes to make your garden more interesting!
- Use the Crops Total worksheet to calculate how many items you have planted in the garden.

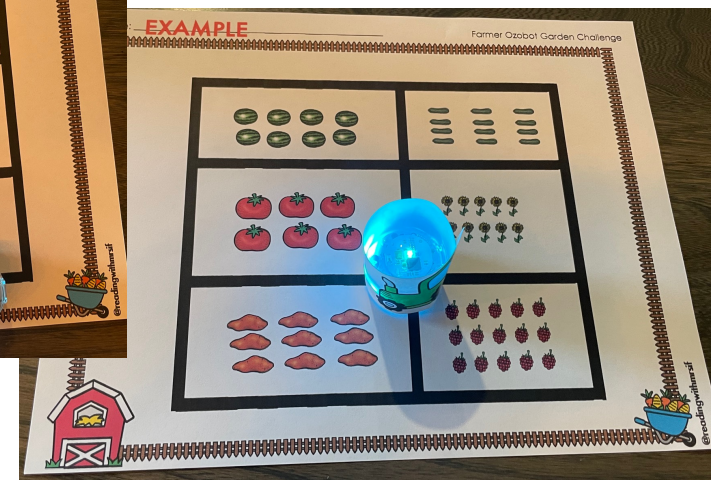
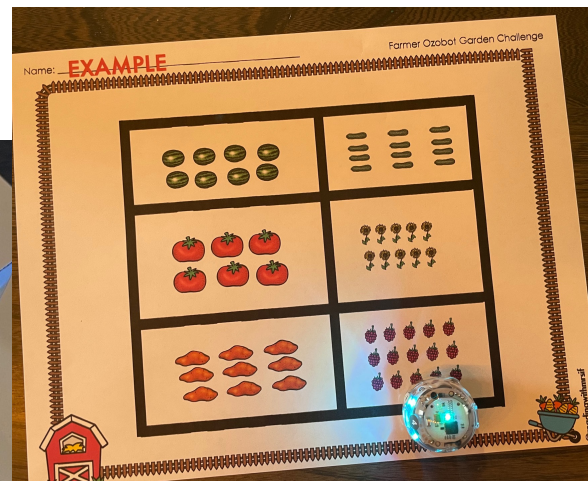
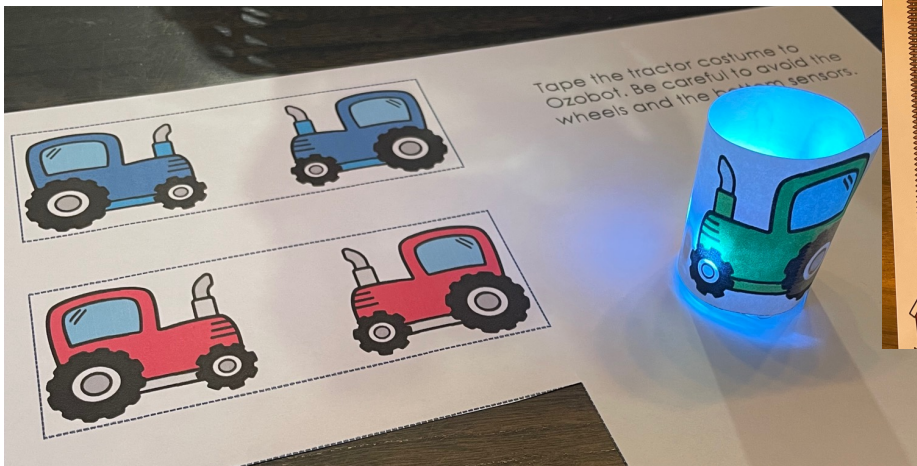
# FARMER OZOBOT GARDEN CHALLENGE

*using color codes*

## Teacher Tips:

- Use the new [Ozobot Color Code Guide](#) to help students with all things color-coding!
- There are two garden templates. One where students just fill in the crops and another where they design the whole garden.
- It may be helpful to print the garden template on larger paper or allow students to draw their own fence on larger paper.
- Ozobot may have trouble traveling the pathway if drawings are too close to the black line.
- Ways to adjust the challenge:
  - Adjust the number of required crops.
  - Require students to use certain size arrays, depending on their multiplication skill.
  - Have students add color codes to the lines to represent Farmer Ozobot farming in his garden.

## Helpful Pictures:



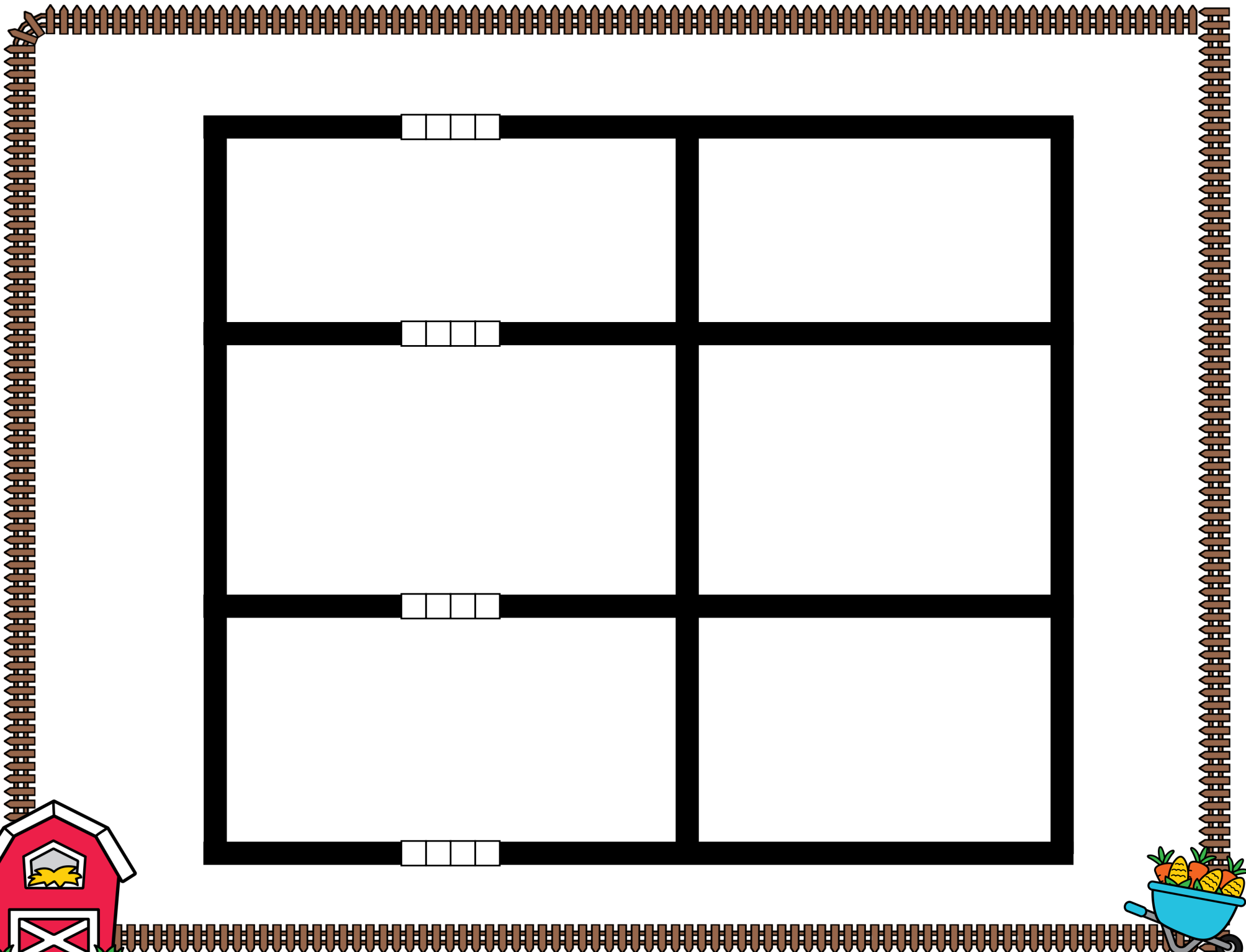
Name: \_\_\_\_\_

Farmer Ozobot Garden Challenge



Name: \_\_\_\_\_

Farmer Ozobot Garden Challenge

A decorative border made of brown wooden picket fence posts surrounding the entire page.

A red barn with a white roof, a yellow hay bale in the window, and a white double door with a red 'X' on it.

A blue wheelbarrow filled with various farm produce including corn cobs, carrots, and leafy greens.

|  |  |
|--|--|
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@readingwithmrsif

| Crop: | Array Size: | Total Items: |
|-------|-------------|--------------|
|       |             |              |
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|       |             |              |
|       |             |              |
|       |             |              |

Crops Totals:

I had \_\_\_\_\_ different crops.

I had \_\_\_\_\_ items in all.

My biggest crop is \_\_\_\_\_.

My smallest crop is \_\_\_\_\_.

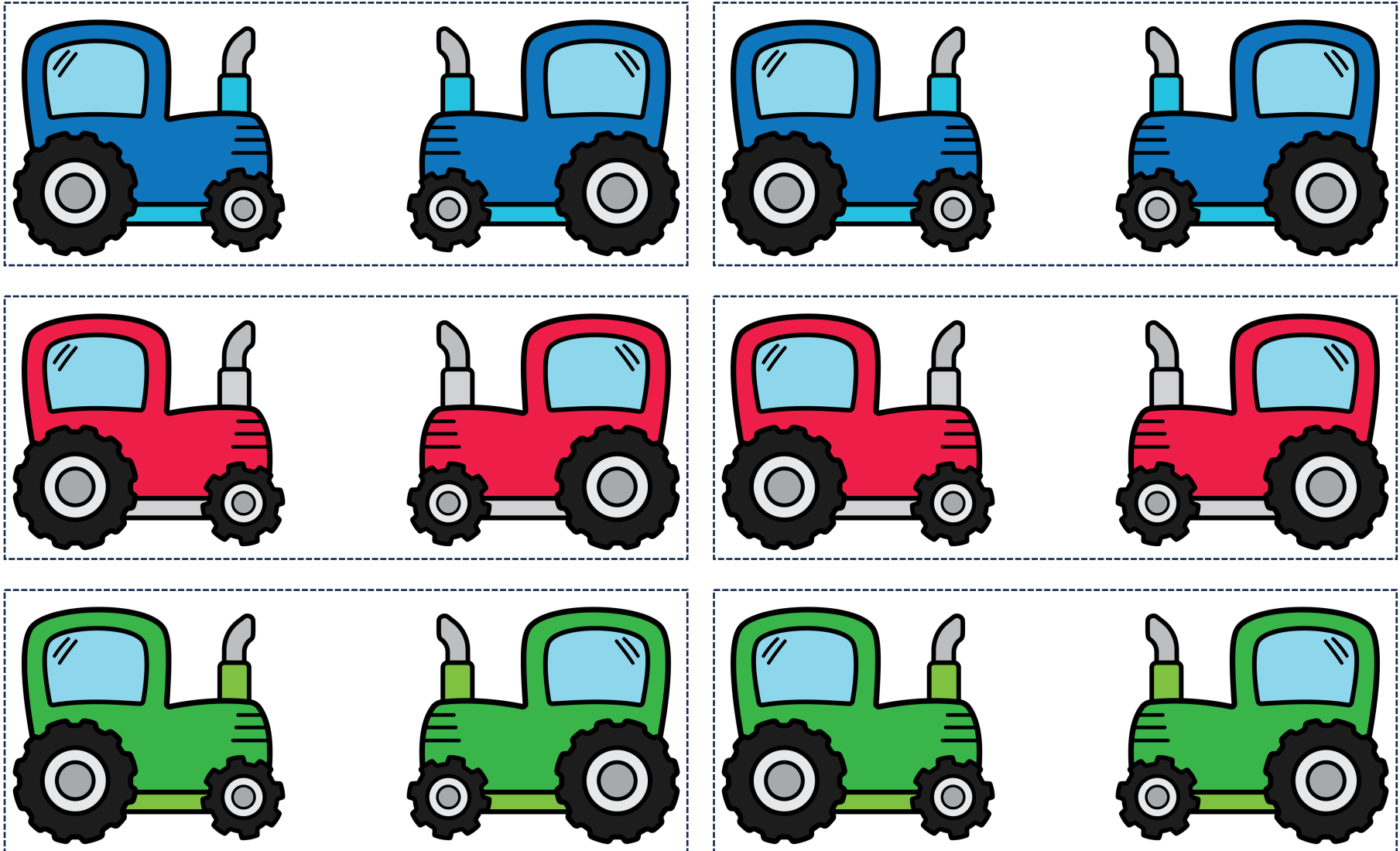
If I made a new garden, I would  
change \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.



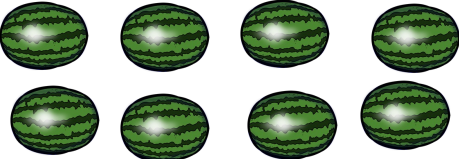
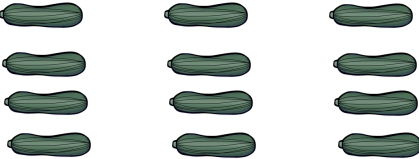
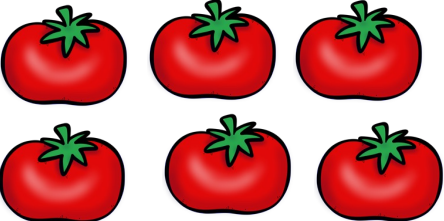
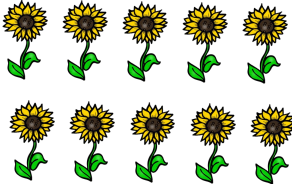
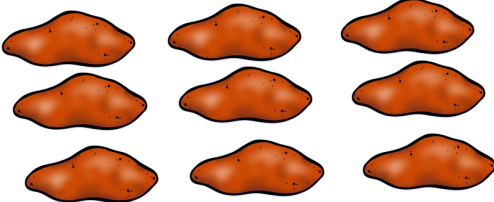
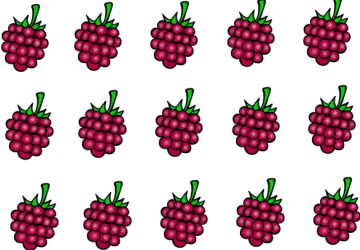
## Farmer Ozobot Tractor Costume

Cut on the dotted lines. Wrap the paper around an Ozobot. Use tape to hold the paper together.

\*Be careful to avoid the wheels and the bottom sensors on the Ozobot.



Name: **EXAMPLE**

|                                                                                                                                              |                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
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\_\_\_\_\_  
\_\_\_\_\_.

