



I want to say a huge THANK YOU to my incredible project team. Everyone's creativity and dedication to fun, accessible plant education made this project what it is today, and I am so proud of the work we did together.

**Fiskars:** Lead Sponsor and maker of the best plant and gardening tools around. They've been supporting Team Farmer Nick since the very beginning and I couldn't have done this without their support.

Nick Cutsumpas: Project Leader, Script Writer, Lovable Farmer, Brilliant Plant, and Mischievous Gnome

Coerriculums LLC: Curriculum and Creative Designer

Adam Coe: Head Creative Illustrator

Anna Dreslinski: Film Director

Lindsay Marder: Head of Marketing and Layout Designer

Szymon Dybowski: Filmmaker and Editor

We would also like to thank all of the family members, teachers, mentors, and everyone who inspired the joy of learning through experiments and nature. Teaching the next generation about the importance of plants and environmentalism is integral to the future of our planet, and it is an honor to do this work together.

Always be growing, Nick



## Dear Little Human,

Thank you so much for coming on this Plant Adventure with Farmer Nick and me. Farmer Nick doesn't know that much about plants, so it will be great to have you as our Plant Explorer to help him along the way.

In this workbook, you will learn all about how plants grow! From soil to seeds and water to sun, there are lots of activities for you to try, but don't worry! Farmer Nick and I will be with you every step of the way.

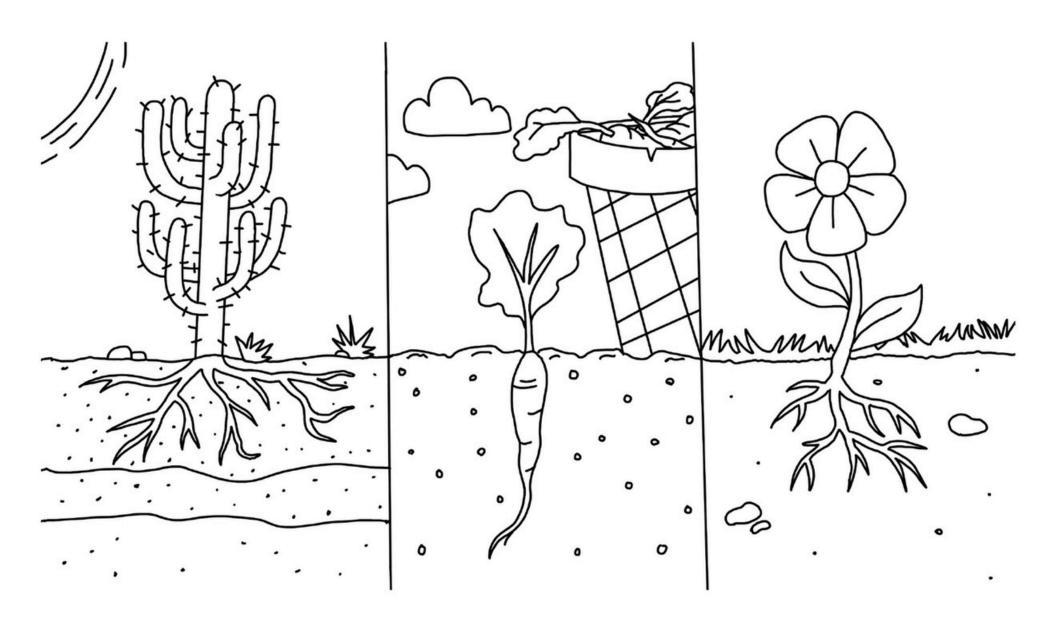
The more you learn about plants, like me, the better we can take care of our planet! You will also get your very own Plant Explorer Badge after finishing this workbook. I'm counting on you!

## Always be growing, Plant

PS. Keep an eye out for the Magical Garden Gnome! He is such a trickster and is always sneaking around...



## **Color in the Plants and Their Soils!**



## **Activity 2: Soil Recipe**

#### **Learning Skill**

Identifying what soil is made of.

#### **Time Allotted**

20 Minutes

#### **Materials Needed**

- ➤ Activity Book
- ➤ Pencil
- Scissors
- ➤ Glue Stick

#### **Background Knowledge**

Soil is made up of 25% air, 25% water, 45% pieces of rocks and minerals, and 5% organic material like the leaves.

#### **Questions to Ask**

- 1. What item are you going to put in your jar?
- 2. What items shouldn't be put in the jar?
- 3. Does your jar follow the recipe?

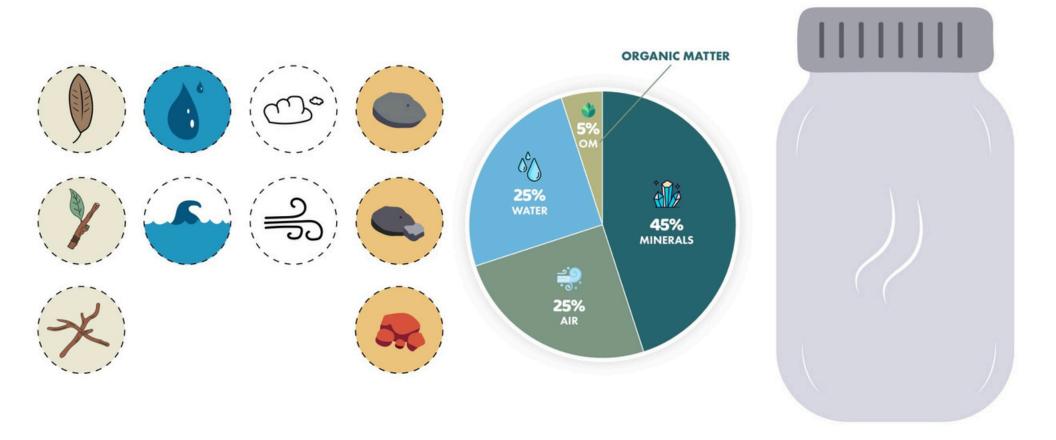
#### Direction

- 1. Gather all materials.
- 2. Write your name.
- 3. Cut out the soil ingredients.
- 4. Using the background information, figure out how many of the ingredients are needed to make soil.
- **5.** Once determined, glue the needed ingredients into the jar.
- 6. Use this jar to remember what soil is made of!



<sup>\*</sup>If you want to go further, label each ingredient and what percentage of soil it makes, next to the jar.

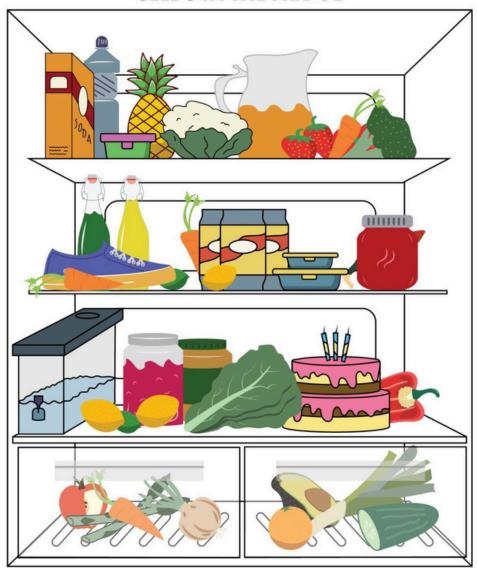
Soil Recipe Name:



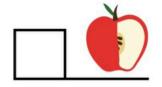
## **Eye Spy the Seed:**

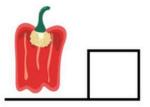
### Name:

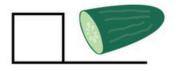
#### **SEEDS IN THE FRIDGE**

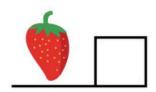












## **Activity 2: Seed Art**

#### **Learning Skill**

Understanding there are several kinds of seeds and together they can make art.

#### **Time Allotted**

15 Minutes

#### **Materials Needed**

- Activity book
- Pencil
- Crayons
- ➤ Sunflower Seeds
- Glue

#### **Background Knowledge**

There are at least 40,000 different seed species! They can come in all shapes and sizes.

#### **Questions to Ask**

- 1. Why do you think seeds are different sizes and shapes?
- 2. What other art could you make with seeds?

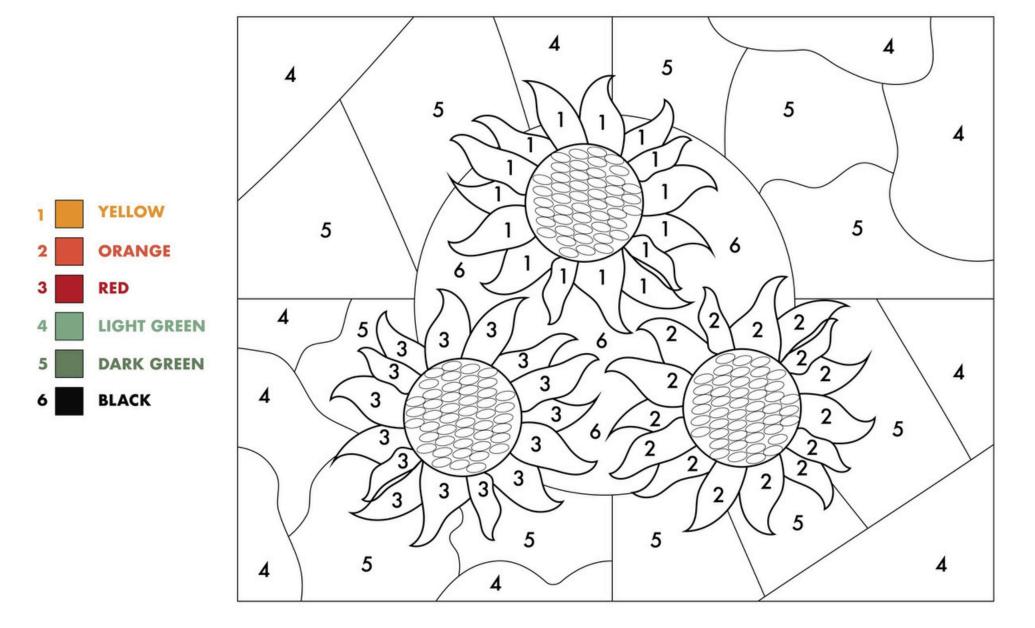
#### **Direction**

- 1. Gather all materials.
- 2. Write your name.
- 3. Glue sunflower seeds to the center of the flowers.
  - a. If you don't have sunflower seeds you can color the center brown or your favorite color.
- 4. Color by number the rest of the page to showcase your amazing art!



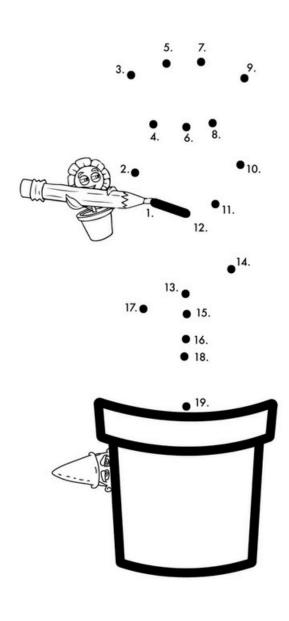
<sup>\*</sup>If you want to go further, try and find different color seeds and glue them on top of the areas you colored! Make sure the colors match as best as you can.

## **Seed Mural Color by Numbers**



## **Connect the Dots!**

# 2. • <sup>15.</sup> 14. 8. 11. 12. • 10.



## **Activity 2: Build a Sunflower**

#### **Learning Skill**

Identifying and recreating how the sun moves.

#### **Time Allotted**

15-20 Minutes

#### **Materials Needed**

- Paper plate
- Yellow and Black Paint (or markers)
- Paint Brushes
- Scissors
- ➤ Glue

#### **Background Knowledge**

The face of a sunflower not only resembles a sun, but will follow the sun wherever it goes! There are over 70 different kinds of sunflowers with many different colors, but they all follow the sun.

#### **Questions to Ask**

- 1. Does my sunflower start and end in the same place every day?
- 2. Are there different kinds of Sunflowers?
- 3. Why is it called a Sunflower?

#### Direction

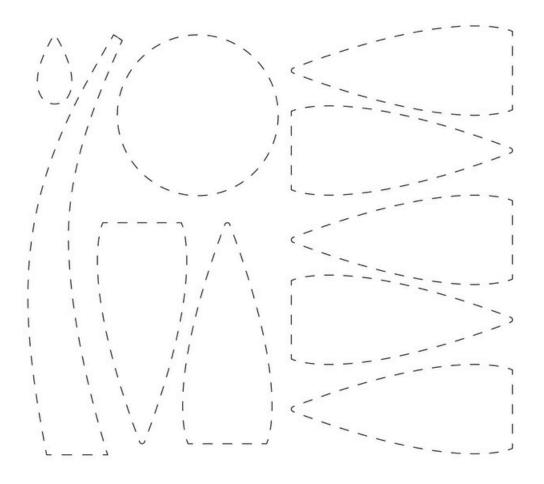
- 1. Gather all your materials.
- 2. Paint or color the paper plate yellow.
- 3. Using q-tips dipped in black paint, make the center of the sunflower by placing lots of black dots. (or use a black marker)
- 4. Set aside to dry
- 5. Use scissors to cut triangles around the plate, making it look like a Sunflower! (Optional: create a stem for your sunflower using glue and green paper.)
- 6. In the morning place or hang your sunflower on the East side of your house, as the day goes on move the sunflower to where the sun is. By the end of the day it should be in the West.
- 7. Take this with you wherever you go and see if the sunflower starts and ends in different areas!

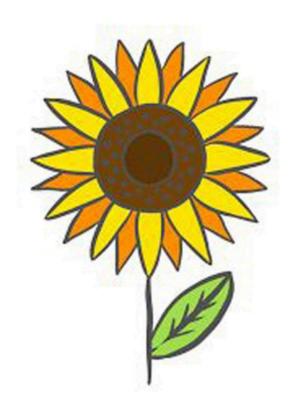
or

 Use the sunflower template in the workbook to color, cut, and glue together.



## **How Sunflower got its Name**





## Complete the Water Maze!



## **Activity 3: Thirsty Plants**

#### **Learning Skill**

Determining the best way to water a plant.

#### **Time Allotted**

20-30 minutes

#### **Materials Needed**

- ➤ Workbook
- > Pencil
- Crayons
- Pant (in terracotta pot preferred)
- Tray
- ➤ Water

#### **Background Knowledge**

Water moves from high concentration to low concentration. Water in a tray under a plant would be high concentration and the soil near the top of a plant is low concentration.

#### **Questions to Ask**

- 1. Where did the water go?
- 2. How did the water move upward?
- 3. Can all plants do this?

#### Direction

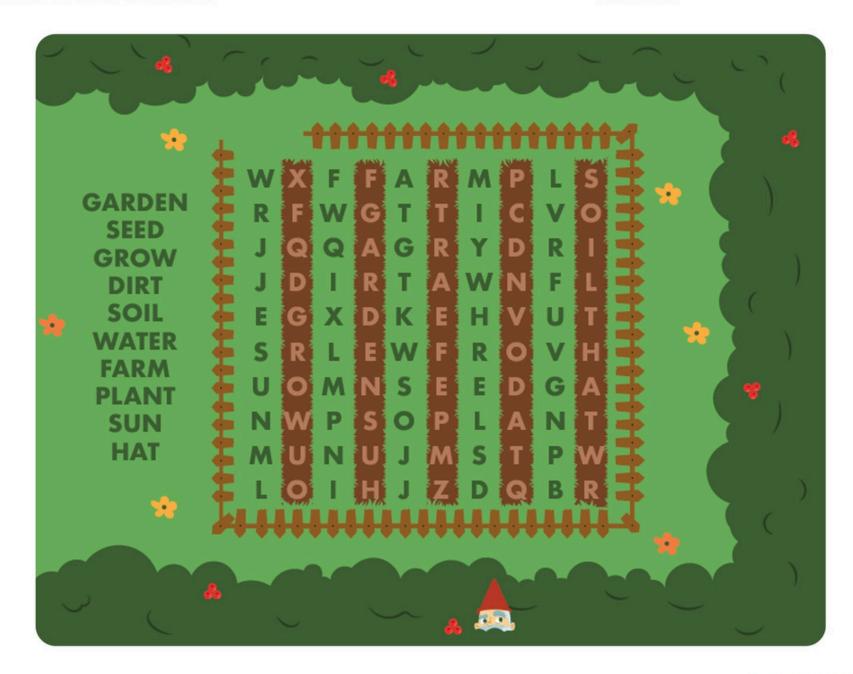
- Gather all materials.
- 2. Place the dry potted plant onto the tray.
- 3. Pour water into the tray.
- 4. Observe what happens over time.
- Using your workbook color in how the water moved.



## **How Plants Drink Water**



### **Plant Word Search!**



## **Activity 3: Plants Give Us Food!**

#### **Learning Skill**

How to propagate vegetable scraps to make more vegetables!

#### **Time Allotted**

Several Days

#### **Materials Needed**

- ➤ Shallow Bowl
- ➤ Water
- ► Celery
- ➤ Sunny Spot
- ➤ Nut Butter or Cream Cheese
- ➤ Raisins

#### **Background Knowledge**

Plants are the center of all food! If it wasn't for plants there would be no animals, dairy, or pizza! Not only do they taste good but they are the reason we have so many other foods.

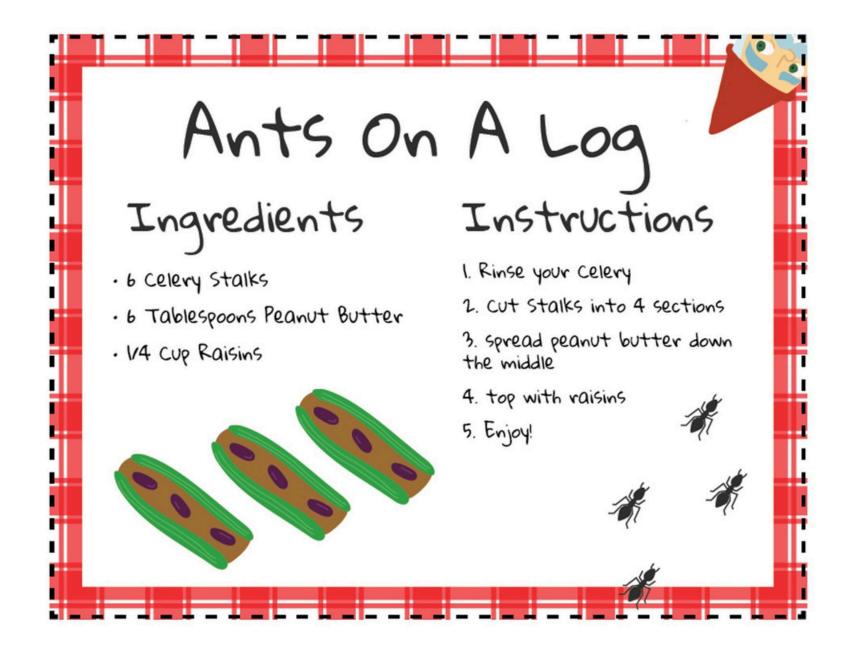
#### **Questions to Ask**

- 1. What different kinds of food can do this?
- 2. Would this work in all climates?
- 3. How can we minimize food waste from this?

#### Activity

- 1. Gather all materials
- 2. Fill shallow bowl with water
- With an Adult cut your celery stalk so there is two inches left at the bottom.
- 4. Place the two inch celery bottom in the shallow bowl of water, cut side facing up.
- Watch the celery regrow some leaves after a few days.
- 6. Once you have a brand new celery stalk follow the recipe on your workbook for a delicious snack!







## Official Plant Explorer!

### You did it!

You helped Farmer Nick learn all about how plants grow and why plants are so important.

Thank you for completing this workbook and as a prize, here is your very own Plant Explorer Badge!

## Always be growing, Plant



