AGRICULTURE

CARROT ACTIVITY WORKBOOK



KINDERGARTEN CLASS

Carrot Exploration Day

ASTEEAMS HANDS-ON LESSON PLAN

LEARNING OBJECTIVES

- Explore carrots using their senses
- Understand that carrots are roots that grow underground
- Practise counting, grouping, and comparing
- Develop fine motor skills through tracing, drawing, and colouring

MATERIALS

- Whole and sliced carrots
- Paper plates or napkins
- Plastic knives (child-safe or teacher use)
- Magnifying glasses
- Paper towels; small cups or bowls for carrot tops, crayons, pencils, and worksheets

LESSON FLOW

1. Warm-Up (5–10 min): Introduce carrots and ask students what they know.

2. Classroom Activities (60 min):

- Touch and describe texture
- Cut open and observe carrot rings
- Observe root hairs with magnifying glasses
- Smell and taste carrots
- Compare raw and cooked carrots
- Count and compare carrot sizes
- Test whether carrots float or sink

3. Worksheet Activities (60 min):

- Trace the word “carrot”
- Review facts & guide
- Size comparison
- Colour a carrot
- Draw a carrot underground
- Count and group carrot slices

4. Discussion (10–15 min): Discuss how carrots grow underground and why roots are important. Use YouTube videos for discussion support.

5. Closing (10 min): Students share what they learned.

EXTENSION IDEAS

Place carrot tops in shallow water and observe growth over time.

Use YouTube videos to reinforce concepts with visual content.

Carrots for Kids
https://www.youtube.com/watch?v=0s2mAoW6n3E

How Do Carrots Grow?
https://www.youtube.com/watch?v=8SCMsuT9bOg

Roots and Root Vegetables for Children
https://www.youtube.com/watch?v=6y0Mbo0k6mA

ASSESSMENT

Observe participation, descriptive vocabulary, counting skills, and understanding of how carrots grow underground.



Carrot Exploration Day!

Touch • Taste • Count • Grow

Class Activity



Teacher Prep

What to Bring::
- Carrots (whole, sliced & cooked)
- Ask students to bring carrot pieces
- Paper plates / napkins
- Paper towels
- Bags or cups for carrot tops
- Crayons & paper
- Teacher knife

🖐️ 1. TOUCH & DESCRIBE

Ask:
- Is the carrot smooth or rough?
- Is it hard or soft?
- What colour do you see?

👃 2. SMELL & TASTE

- Let children smell first
- Then taste a small piece

Ask:
Does it taste sweet, crunchy, or soft?

🔢 3. COUNT & COMPARE

- Count how many carrot pieces are in the class
- Compare big vs small

👉 Student Task:
- "We have ___ carrot pieces"
- Point to the longest carrot

🔍 4. INSIDE DISCOVERY

Cut open a carrot
Ask:
- What do you see inside?
- Do you notice rings or lines? ?

👉 Student Task:
- Draw the inside

🌱 5. CARROT TOP REGROWTH

- Place carrot tops in shallow water
- Observe changes over time

Explain:
"These carrot tops can grow new leaves!"
👉 Student Tasks:
Draw and observe changes each week

6. TEXTURE TEST

Explain: "Carrots can feel rough, smooth, crunchy or soft."
Kids:
- Touch the outside and inside
- Compare raw and cooked carrots

Ask:
Is it crunchy, smooth, or soft?

7. CARROT CLEANING CHALLENGE

- Let children wash carrots in water

Ask:
- Was it easy or messy?

👉Student Task:
- Share with a classmate what it felt like

🧱 8. COUNTING CARROT SLICES

- Count carrot slices in groups

Compare:
Who has more? Less?
👉 Student Task:
- State how many carrot slices they have
- Determine who has the most

🎨 9. CARROT PRINT ART

- Dip carrot pieces in paint
- Make shapes with the pieces

👉 Teaches:
Patterns + shapes +counting

ASTEEAMS



CARROT ADVENTURES



Fun Facts



Carrots are root vegetables that grow underground.



Carrots can be orange, purple, yellow, white, or red.



Rabbits love carrots, but people do too!

Growing Guide



Plant seeds directly in soil.



Sun: They love the bright sun!



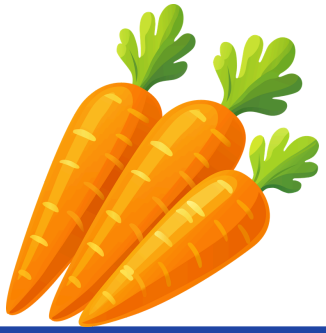
Watering: Keep the soil moist.



Uses: soups and salads, cake, juice or snack on them!

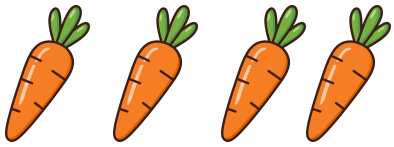
Draw an X on the bigger bunch of carrots

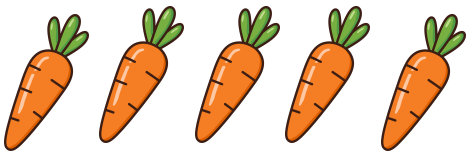




Draw Carrots Growing Underground

Count the Carrots?





Carrot Exploration Day

ASTEEAMS HANDS-ON LESSON PLAN

🎯 LEARNING OBJECTIVES

🌱 Agriculture Objectives

- Identify carrots as root vegetables that grow underground.
- Describe basic plant needs such as water, sunlight and care.
- Observe and discuss how carrot tops can regrow in water.

🔬 Science Objectives

- Use their senses to investigate carrots through sight, touch, smell, taste and sound.
- Compare and describe the properties of raw and cooked carrots.
- Make predictions and record observations during simple investigations.
- Explore floating and sinking through hands-on STEM activities.

💻 Technology Objectives

- Use magnifying glasses and simple tools to investigate carrots closely.
- Watch and discuss educational videos showing how carrots grow and are harvested.

🏗️ Engineering Objectives

- Participate in problem-solving and prediction activities.
- Test and evaluate ideas during the float or sink investigation.
- Use measuring tools to compare carrot sizes and weights.

💡 Entrepreneurship Objectives

- Explore how carrots can be used in foods and products such as juice and snacks.
- Participate in imaginative role play connected to markets, farms and healthy foods.

🎨 Art Objectives

- Create drawings, observations and carrot-inspired artwork.
- Use colour creatively during carrot printing and investigation activities.
- Express ideas through storytelling and imaginative writing prompts.

➕ Mathematics Objectives

- Compare carrots using vocabulary such as longer, shorter, heavier and lighter.
- Count carrot slices and create simple graphs and charts.

📚 Literacy Objectives

- Use descriptive vocabulary to discuss observations.
- Dictate or write simple imaginative stories related to carrots and plant life.

🌍 Sustainability Objectives

- Understand that plants and people both need care to grow strong and healthy.
- Develop appreciation for where food comes from.
- Explore healthy eating habits and caring for living things.

🧑‍🔬 Social and Emotional Learning Objectives

- Build curiosity and confidence through investigation and discovery.
- Work collaboratively during group investigations and discussions.
- Develop observation, communication and critical-thinking skills.
- Reflect on healthy habits and personal growth.

Carrot Explorations

ASTEEAMS Pillars and Activities

🧡 Colour Investigation Activity

ASTEEAMS Pillars *Science • Art • Sustainability*

Materials

·Orange, Purple, Yellow carrots
·Paper, Crayons, Trays

Activity

·Rub carrots onto paper to explore colour staining.
·Compare different carrot colours.
·Discuss how orange foods help our bodies grow strong.

✋ Texture Science Lab

ASTEEAMS Pillars *Science • Mathematics*

Materials

· Whole, Cooked, Shredded carrots
·Trays

Activity

·Compare rough, smooth, crunchy and soft textures.
·Explore cooked and raw carrots.
·Describe how each carrot feels.

🔬 Carrot Detectives

ASTEEAMS Pillars *Science • Technology*

Materials

·Magnifying glasses, Carrots
·Science journals, Pencils

Activity

·Investigate rings, lines and root hairs.
·Complete “I noticed...” and “I wondered...” prompts.
·Draw observations like little scientists.

💧 Regrowing Carrot Tops

ASTEEAMS Pillars *Science • Technology• Sustainability*

Materials

·Magnifying glasses, Carrots
·Science journals, Pencils

Activity

·Place carrot tops in shallow water.
·Observe growth weekly.
·Measure and draw changes over time.

📏 Carrot Maths Fun

ASTEEAMS Pillars *Mathematics • Engineering*

Materials

·Carrots, Rulers, Balance scales

Activity

·Compare carrots from shortest to longest.
·Explore heavier and lighter.
·Count carrot slices and carrot coins.

Carrot Explorations

ASTEEAMS Pillars and Activities

STEM Float or Sink Challenge

ASTEEAMS Pillars *Science • Engineering • Mathematics*

Materials

·Water tubs
·Whole carrots, Carrot pieces
·Recording sheets

Activity

·Predict whether carrots will float or sink.
·Test whole carrots and carrot pieces.
·Record and discuss results.

Creative Writing and Art

ASTEEAMS Pillars *Art • Entrepreneurship*

Materials

· Whole, Cooked, Shredded carrots
·Trays

Activity

·Write a story that starts “If I Were a Carrot…”
·Draw carrots underground.
·Create other carrot stories.

Carrot Detectives

ASTEEAMS Pillars *Science • Technology*

Materials

·Magnifying glasses, Carrots
·Science journals, Pencils

Activity

·Investigate rings, lines and root hairs.
·Complete “I noticed…” and “I wondered…” prompts.
·Draw observations like little scientists.

Growing Strong

ASTEEAMS Pillars *Science • Sustainability*

Materials

·Drawing paper, Crayons, Mirrors

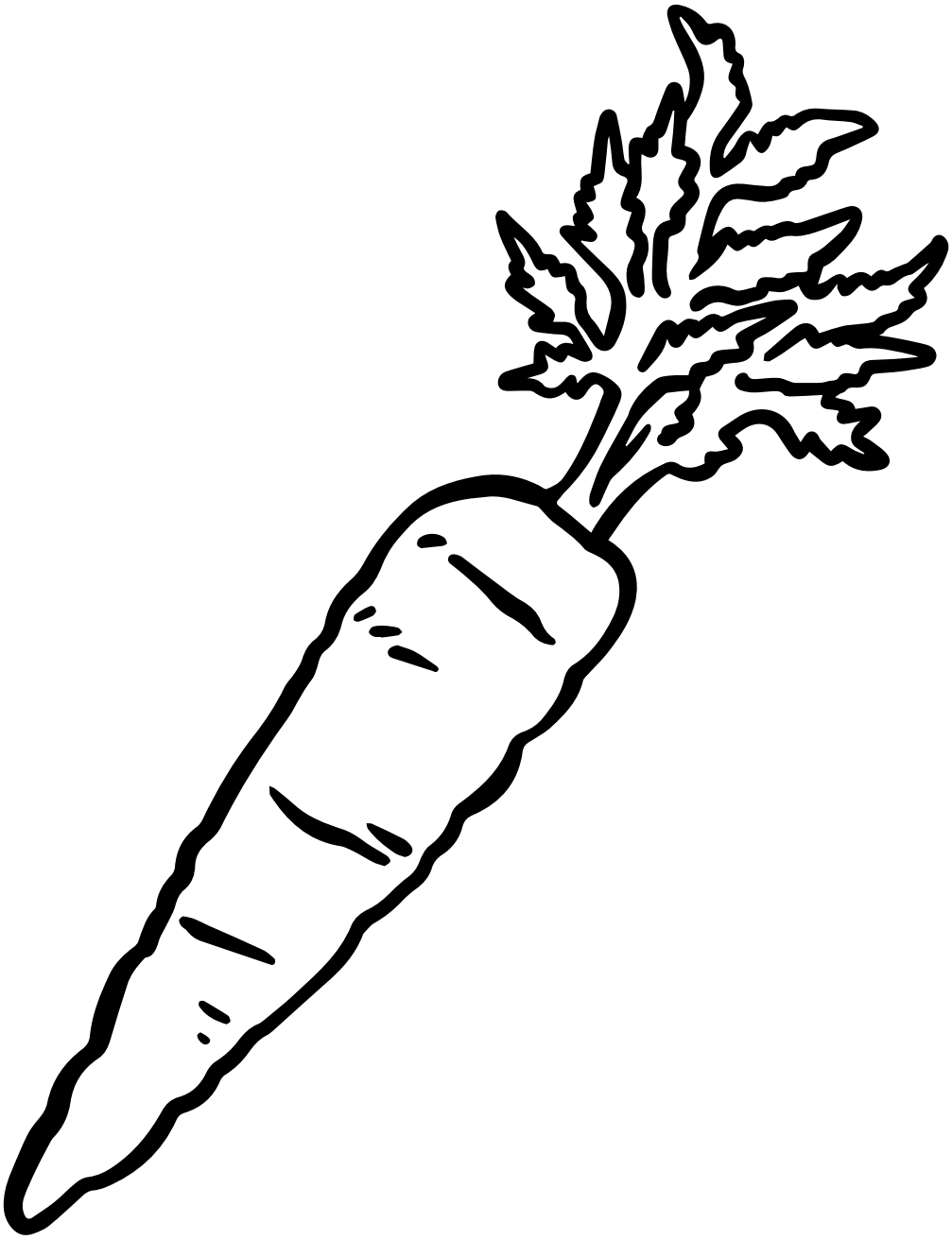
Activity

·Discuss how plants and people both need care to grow.
·Draw themselves growing strong from healthy foods.
·Talk about healthy habits.

Kindergarten Vocabulary

ASTEEAMS Pillars *ALL*

root • underground • crunch • sprout • observe • compare • heavier • lighter • longer • shorter • float • sink • investigate • texture • predict



carrot

