AGRICULTURE

CUCUMBER ACTIVITY WORKBOOK



KINDERGARTEN CLASS

Cucumber Exploration Day

ASTEEAMS HANDS-ON LESSON PLAN

LEARNING OBJECTIVES

- Explore cucumbers using their senses
- Understand that cucumbers grow from seeds
- Practice counting, grouping, and comparing
- Develop fine motor skills through tracing, drawing, and coloring

MATERIALS

- Whole and sliced cucumbers
- Paper plates or napkins
- Plastic knives (child-safe or teacher use)
- Paper towels; Small cups or bags for seeds
- Crayons, pencils, and worksheets

LESSON FLOW

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

2. Classroom Activities (60 min):

- Touch and describe texture
- Cut open and observe seeds
- Save seeds for planting
- Seed counting
- Smell and taste
- Count and compare sizes
- Try skin as an eraser

3. Worksheet Activities (60 min):

- Trace the word “cucumber”
- Review facts & guide
- Long/short comparison
- Color a cucumber
- Draw a cucumber
- Count and group

4. Discussion (10–15 min): Discuss origin and growers. Use YouTube videos for the discussion aspect.

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

EXTENSION IDEAS

Plant saved seeds and observe growth over time.

Use YouTube videos to reinforce concepts with visual content.

Cucumber Song-Counting 1-10
https://www.youtube.com/watch?v=ROWH7NtThkY

Cucumber for kids
https://www.youtube.com/watch?v=2dgBi5bEPmY

George plants too many cucumbers
https://www.youtube.com/watch?v=gE7kjMbd-Rs

ASSESSMENT

Observe participation, counting, and growth of understanding.

Cucumber Exploration Day!

Touch • Taste • Count • Grow

Class Activity

Teacher Prep

What to Bring:

- Cucumbers (whole + sliced
  - Ask students to bring in cucumbers
- Paper plates / napkins
- Plastic knives (child-safe)
- Paper towels
- Bag for seeds
- Crayons & paper

🖐️ 1. TOUCH & DESCRIBE

Ask:

- Is the cucumber smooth or bumpy?
- Is it hard or soft?
- What color do you see?

👃 2. SMELL & TASTE

- Let children smell first
- Then taste a small piece

Ask:

- Does it taste sweet, watery, or crunchy?

🔢 3. COUNT & COMPARE

- Count how many cucumbers in the class
- Compare big vs small

👉 Student Task:

- "We have ___ cucumbers"
- Point to the biggest one

🔍 4. INSIDE DISCOVERY

Cut open a cucumber

Ask:

- What do you see inside?
- What shape are the seeds?

👉 Student Task:

- Draw the inside

🌱 5. SEED SAVING

- Scoop out seeds
- Rinse and dry them

Explain:

"These seeds can grow NEW cucumbers!"

👉 Student Tasks:

Take out seeds, wash, dry and stick seeds on paper towels to dry completely

💧 6. WATER TEST

Explain:

"Cucumbers are mostly water!"

👉 Kids

- Everyone gets a piece of paper towel and a piece of cucumber
- Press cucumber in paper towel
- Examine and observe moisture

✏️ 7. CUCUMBER SKIN ERASER

- Let kids try erasing pencil marks with cucumber skin
- Everyone draw what their neighbors face looked like when they tasted the cucumbers

Ask:

- Did the cucumber eraser work?

👉 Student Task:

- Share with their classmate if it worked

🧮 8. SEED COUNTING

- Count seeds in 1 slice

👉 Compare:

Who has more? Less?

🎨 9. CUCUMBER PRINT ART

- Dip cucumber slices in paint
- Stamp on paper

👉 Teaches:

Patterns + shapes

Cucumber Adventures

Fun Facts

95% Water: They have lots of water inside!

Cool Centers: 20° cooler than the air!

They are fruits because they have seeds!

Growing Guide

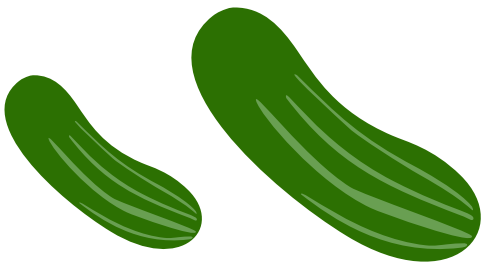
Planting: 1 inch deep in soil.

Sun: They love the bright sun!

Watering: Keep the soil moist.

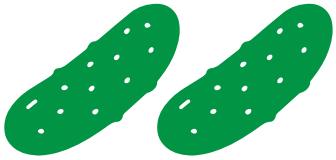
Uses: Salad, Pickles, or a Snack!

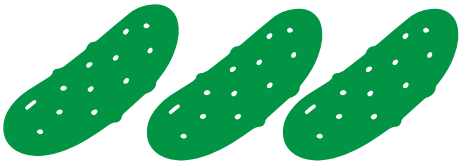
Circle the longer Cucumber



Draw your cucumber plant

Count the Cucumbers?





Cucumber Explorations

ASTEEAMS Pillars and Activities

🧡 Colour Investigation Activity

ASTEEAMS Pillars *Science • Art • Sustainability*

Materials

Cucumbers, paper, crayons

Activity

- Compare cucumber colours.
- Explore cucumber skin patterns.

✋ Texture Science Lab

ASTEEAMS Pillars *Science • Mathematics*

Materials

- *Whole cucumbers, sliced cucumbers*

Activity

- Compare rough, smooth and wet textures.
- Describe cucumber textures.

🔬 Cucumber Detectives

ASTEEAMS Pillars *Science • Technology*

Materials

- Magnifying glasses, cucumbers, journals

Activity

- Investigate seeds and skin patterns.
- Draw discoveries.

💧 Saving Cucumber Seeds

ASTEEAMS Pillars *Science • Agriculture • Sustainability*

Materials

- Magnifying glasses, cucumbers
- Science journals, Pencils

Activity

- Scoop out cucumber seeds.
- Observe and dry seeds.

📏 Cucumber Maths Fun

ASTEEAMS Pillars *Mathematics • Engineering*

Materials

- Cucumbers, rulers

Activity

- Compare cucumbers from shortest to longest.
- Count cucumber slices.



Cucumber Explorations

ASTEEAMS Pillars and Activities

STEM Float or Sink Challenge

ASTEEAMS Pillars *Science • Engineering • Mathematics*

Materials

- Water tubs, cucumbers, recording sheets

Activity

·Predict whether cucumbers will float or sink.
·Test whole and cucumber pieces.
·Record and discuss results.

Creative Writing and Art

ASTEEAMS Pillars *Art • Entrepreneurship*

Materials

- Paper, crayons, prompts

Activity

- Write “If I Were a Cucumber…”
- Draw cucumbers growing on vines.

Taste and Smell Investigation

ASTEEAMS Pillars *Science • Health*

Materials

- Cucumber slices, napkins

Activity

- Smell and taste cucumbers.
- Discuss healthy snacks.

Growing Strong

ASTEEAMS Pillars *Science • Sustainability*

Materials

- Drawing paper, crayons

Activity

- Discuss how plants and people grow strong.
- Talk about healthy habits.

Kindergarten Vocabulary

ASTEEAMS Pillars *ALL*

vine • flower • seed • cucumber • harvest • crunchy • smooth • bumpy • observe • compare • measure • longer • shorter • heavier • lighter • float • sink • investigate • predict • healthy • garden • trellis • hydrate • compost

Cucumber Exploration Day

ASTEEAMS HANDS-ON LESSON PLAN 🎯 LEARNING OBJECTIVES

🌱 Agriculture Objectives

- Identify cucumbers as fruits that grow on vines above the ground.
- Describe basic plant needs such as water, sunlight, soil, and support structures like trellises.
- Observe and discuss how cucumbers develop from flowers into fruits.
- Explore how cucumber seeds can be saved and planted to grow future crops.

💻 Technology Objectives

- Use magnifying glasses and simple tools to investigate cucumbers closely.
- Watch and discuss educational videos showing how cucumbers grow, flower, and are harvested.
- Observe photographs and videos of different cucumber varieties from around the world.

🎨 Art Objectives

- Create drawings, observations, and cucumber-inspired artwork.
- Use colour creatively during cucumber printing and investigation activities.
- Design cucumber seed packets or market signs.
- Express ideas through storytelling and imaginative writing prompts.

➕ Mathematics Objectives

- Compare cucumbers using vocabulary such as longer, shorter, heavier, lighter, thicker, and thinner.
- Count cucumber slices, seeds, and vine leaves.
- Create simple graphs and charts based on cucumber observations.
- Measure cucumber lengths using rulers, cubes, or non-standard units.

💡 Entrepreneurship Objectives

- Explore how cucumbers can be used in foods and products such as salads, pickles, juices, and snacks.
- Discuss how farmers grow and sell cucumbers at markets.
- Participate in imaginative role play connected to farms, markets, and healthy food businesses.
- Explore how value can be added to cucumbers through processing and packaging.

📚 Literacy Objectives

- Use descriptive vocabulary to discuss cucumber observations.
- Learn and use words such as vine, flower, seed, harvest, crunchy, smooth, and cucumber.
- Dictate or write simple imaginative stories related to cucumbers and plant life.
- Participate in discussions about healthy foods and gardening experiences.

🔬 Science Objectives

- Use their senses to investigate cucumbers through sight, touch, smell, taste, and sound.
- Compare and describe the properties of cucumber skin, flesh, and seeds.
- Make predictions and record observations during simple investigations.
- Explore floating and sinking through hands-on STEM activities using cucumber pieces.
- Investigate how cucumbers contain water and help keep our bodies hydrated.

🏗️ Engineering Objectives

- Participate in problem-solving and prediction activities.
- Design simple supports or trellises for cucumber vines using classroom materials.
- Test and evaluate ideas during the float or sink investigation.
- Use measuring tools to compare cucumber lengths, widths, and weights.

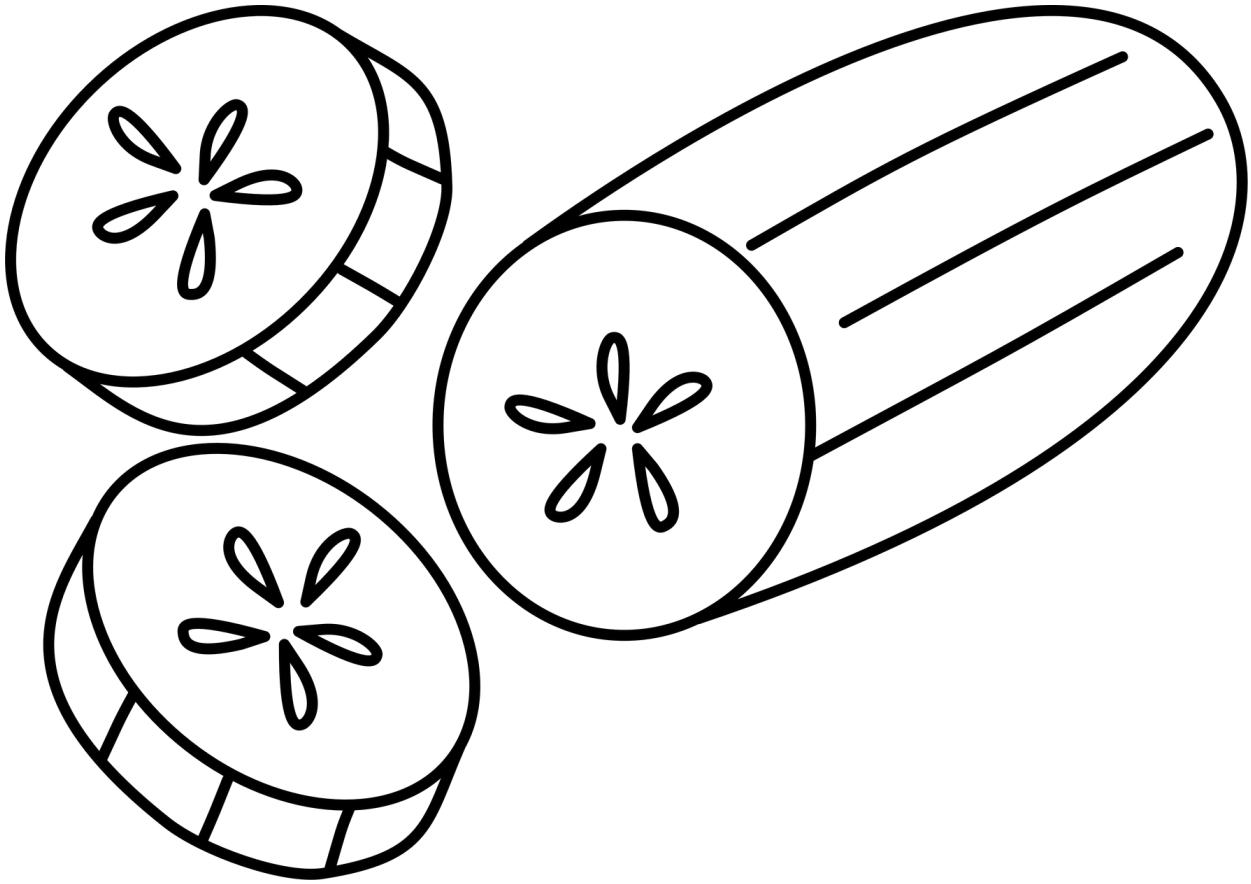
🌍 Sustainability Objectives

- Understand that plants and people both need care to grow strong and healthy.
- Develop appreciation for where food comes from.
- Explore seed saving and how it supports future food production.
- Learn how compost and healthy soil help cucumbers grow.
- 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.
- Practice patience and responsibility while caring for growing plants.

Colour and Trace



cucumber

Colour the Cucumber Plant

