

What Does Our Plant Need?

Observe a plant over time and identify what helps it grow.

Name: _____ Date: _____

Part 1: Our Plant Check

Listen as your teacher tells you where our plant gets light and water. Look closely. An observation is something you see. A prediction is what you think may happen later.

1. Visit our plant three times. Draw a small leaf or soil mark. Tell an adult one thing you see. The adult may write your words.

Plant visit	I looked.	What I see
Day 1		
Day 3		
Day 5		

2. On Day 5, draw our plant. Try to include a leaf, stem, soil or growing material, and the pot.

3. Make a prediction. Draw, tell, or write what you think may happen if our plant gets the care it needs.

I predict our plant will

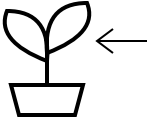
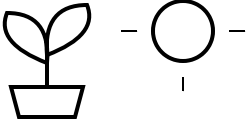
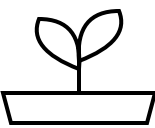
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Part 2: Plant Need Picture Talk

These are **classroom picture cards made for this worksheet**. Listen as your teacher describes each pair. For each row, circle the picture that seems to give the plant what it needs. We are comparing pictures. We are not testing these conditions on our class plant.

1. Air	a  no air model	b  air available
2. Sunlight	a  dark cupboard	b 
3. Water	a  dry soil	b 
4. Nutrients	a 	b  dots = nutrients
5. Space	a 	b 

Tell your teacher: One plant need I can name is

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Answer Key and Teaching Notes

Print and supply all student pages, keeping teacher-key pages separate.

Goal and materials. Supplied: the Plant Check record and original classroom picture cards. Additionally needed: one healthy potted classroom plant in potting mix or another appropriate growing medium, saucer, normal water source, pencil, crayons, and an adult to write dictated observations if needed. A hand lens is optional.

Exact setup. Before Part 1, place one healthy plant where it receives the normal appropriate light for that plant. Keep it in its usual pot and growing medium. Do not cover it, crowd it, move it into darkness, withhold water, or add experimental treatments. Schedule brief observations on Day 1, Day 3, and Day 5. Continue ordinary care according to the plant's needs. Potting mix supplies nutrients; other growing materials can also support plants.

Teaching script. Say: "Scientists look carefully and record what they see. An observation is not a guess. A prediction is what you think may happen." At each visit say: "Look at the leaves, stem, pot, and growing material. What do you see today?" For Part 2 say: "These are only picture comparisons. We will keep caring for our real plant." Point to row 1: "Picture a is an imaginary no-air model. Picture b has arrows showing available air. Plants need air." Row 2: "Picture a shows a plant in a dark cupboard. Picture b shows the sun shining on the plant." Row 3: "Picture a has dry soil, shown by the crack marks in the pot. Picture b shows a watering can adding water." Row 4: "Picture a has soil without the nutrient dots. Picture b has dots that stand for mineral nutrients that the plant takes up from the soil." Row 5: "Picture a has two plants rooted in one small, crowded pot. Picture b has one plant with more room in a wider pot."

Observation method and scoring. Observe each child during all three plant visits. For each visit, accept a drawing, gesture, dictated phrase, or independently written word that identifies at least one visible feature, such as "leaf," "stem," "soil," "wet," "dry," "up," or "same." A child may record the same visible feature on more than one day if it is honestly observed. Do not expect a particular change; a healthy plant may look much the same across five days. Prompt, "Did you see that, or do you think it might happen?" Record whether the child distinguishes observation from prediction with support.

Answers. 1. **Visit our plant three times:** answers vary. Full credit requires a mark or drawing showing participation at each of the three visits and one observed visible feature recorded, drawn, gestured, or dictated for each visit. 2. **On Day 5, draw our plant:** answers vary. Accept a drawing that includes the plant and at least one visible feature. The listed leaf, stem, soil or growing material, and pot are suggested details, not required for full credit. 3. **Make a prediction:** answers vary. Accept a reasonable future-focused statement, drawing explanation, or dictated response, such as "it will grow more leaves," "it will grow," or "it will stay healthy." 4. **Plant Need Picture Talk:** 1-b (air is available around the plant), 2-b (sunlight), 3-b (water), 4-b (mineral nutrients in soil), 5-b (space). 5. **Tell your teacher:** accept any one of air, sunlight, water, nutrients in soil, or space to grow.

Source credit. TEKS Science K.12.A, "Organisms and environments," teacher task contract:

<https://lessonmakerpro.com/standards/teks-science/k-12-a>