Plant Problem Solvers

Explore plant survival and test a seed-spacing design.

L.1.4 "Students will demonstrate an understanding of the ways plants adapt to their environment in order to survive. Explore the cause-and-effect relationship between plant adaptations and environmental changes (i.e...."

NAME _____ DATE _____

Teacher: this page is run aloud. The script and answers are on the guide page.

1 PLANT CLUES

a	sun	soil	rain
b	wind	water	shade
c	flowers	roots	spines

2 SPACE SEEDS

Plan	
Test	
Fix	

ANSWER KEY

Plant Problem Solvers

GRADE 1 · L.1.4

HOW TO RUN THIS PAGE

Read each question and its choices aloud. Give each student a pencil for the design task, and observe how students test and improve their seed spacing.

Students never read directions on this sheet. Read each part's script aloud, then each prompt, giving think time before students mark.

PART 1 · PLANT CLUES

SAY "Plants need ways to live where they grow. Listen to each question and circle one word."

ROW	SAY	STUDENTS CIRCLE
a	A plant's leaves turn toward the light. What are the leaves reaching for? Listen to the choices: sun, soil, rain. Circle one word.	**sun**
b	The soil gets very dry, and a plant's leaves wilt. What does the plant need? Listen to the choices: wind, water, shade. Circle one word.	**water**
c	A desert plant gets little rain. Which part can help it lose less water? Listen to the choices: flowers, roots, spines. Circle one word.	**spines**

PART 2 · SPACE SEEDS

SAY "A farmer's seeds grow too close together and crowd each other. In Plan, draw three dots to show where you would plant seeds; in Test, build your plan by drawing three dots, then check whether your pencil eraser fits between each pair of dots. In Fix, draw three dots with gaps that fit the eraser, or make the gaps more even if your Test gaps already fit; tell me how your change helps the plants."

- Box 1 (beside Plan): **Three dots showing proposed seed spots.**
- Box 2 (beside Test): **Three dots modeling the plan; student checks both gaps with a pencil eraser.**
- Box 3 (beside Fix): **Three dots with gaps that fit the eraser, or more even gaps if the test passed. Student explains that space helps plants grow without crowding.**

WHAT TO ACCEPT

Circle sun, water, and spines. For the design, accept a visible revision and an oral explanation that spacing gives growing plants room.