Seeing the Pencil

Students use a light-change observation to explain what helps them see an object.

1-PS4-2 "Construct an evidence-based account for how objects can be seen only when illuminated. (SEP: 6; DCI: PS4.B; CCC: Cause/Effect)"

NAME _____ DATE _____

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

1 CIRCLE ONE

a | on | off | both

b | wind | sound | light

2 SHOW AND TELL

off	
on	

ANSWER KEY

Seeing the Pencil

GRADE 1 · 1-PS4-2

HOW TO RUN THIS PAGE

Have students stay seated and observe a pencil on the worksheet while you turn the room lights off and on. Use a room that becomes noticeably darker with the lights off. Listen to each student's explanation and record any support given separately.

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

PART 1 · CIRCLE ONE

SAY "Put your pencil on this paper. Look at it when I turn the room lights off, then look again when I turn them on. Notice what changes."

ROW	SAY	STUDENTS CIRCLE
a	The choices are on, off, and both. When could you see your pencil better? Circle one.	**on**
b	The choices are wind, sound, and light. What must shine on the pencil for you to see it? Circle one.	**light**

PART 2 · SHOW AND TELL

SAY "The words by the boxes are off and on. Write hard or easy in each box to show how it was to see your pencil. Then tell me what you noticed both times and what you think made the difference."

- Box 1 (beside off): **hard**
- Box 2 (beside on): **easy**

WHAT TO ACCEPT

Circle on, then light. Accept hard for off and easy for on when those words match the student's observation. Listen for an oral explanation that uses the change in visibility as evidence that light reaching the pencil helped the student see it.