Light and Shadows

Observe how light makes a pencil visible and how a hand changes its shadow.

P.1.6A "Students will demonstrate an understanding that light is required to make objects visible. Construct explanations using first-hand observations or other media to describe how reflected light makes an object visible..."

NAME _____ DATE _____

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

1 LOOK AND CIRCLE

a

sound	light	wind

b

loud	fast	dim

2 WATCH A SHADOW

1	
2	

ANSWER KEY

Light and Shadows

GRADE 1 · P.1.6A

HOW TO RUN THIS PAGE

Use a pencil, paper, hands, and a classroom light. Find a spot where a hand makes a visible shadow on paper, and listen for each student's observations and explanations.

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

PART 1 · LOOK AND CIRCLE

SAY "Put a pencil on your paper under the classroom light. Shade the pencil with your hand, but do not hide it. Tell me what you notice and how light gets from the pencil to your eyes."

ROW	SAY	STUDENTS CIRCLE
a	I will read the choices: sound, light, wind. What must shine on the pencil so you can see it? Circle one word.	**light**
b	I will read the choices: loud, fast, dim. When your hand blocks some light, how does the pencil look? Circle one word.	**dim**

PART 2 · WATCH A SHADOW

SAY "Hold your hand above a blank part of your paper under the classroom light, then raise it toward the light. Tell me why a dark patch forms and how it changes. In box 1, write one word for what you saw on the paper. In box 2, write whether it grew bigger or smaller when you raised your hand."

- Box 1 (beside 1): **shadow**
- Box 2 (beside 2): **bigger**

WHAT TO ACCEPT

Accept phonetic spelling in the boxes if the student's oral response confirms shadow and bigger. Listen for an explanation that light bounces off the pencil to the eyes, and that the hand blocks light to form a shadow that grows as the hand moves closer to the light; record any support separately.