

Light Path Detectives

Students plan a fair test and record what a beam of light does with four materials.

1-PS4-3 "Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light..."

NAME _____

DATE _____

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

1 PLAN IT _____

a	light	sound	water
b	same	different	random

2 TEST IT _____

a	through	some	blocked	back
b	through	some	blocked	back
c	through	some	blocked	back
d	through	some	blocked	back

HOW TO RUN THIS PAGE

Provide a beam of light and samples of clear plastic, wax paper, cardboard, and a mirror. Read Part 1 before testing, then conduct each test in Part 2 and have students record the observed effect of the light.

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

PART 1 • PLAN IT

SAY “How can we plan a fair light test? Listen to each question and circle one word in each row.”

ROW	SAY	STUDENTS CIRCLE
a	Will we test the materials with light, sound, or water? Circle the word you choose.	light
b	Will we use the same light test each time, a different test, or a random test? Circle your choice.	same

PART 2 • TEST IT

SAY “Now watch each light test. After each test, listen to the choices and circle the word that tells what you saw.”

ROW	SAY	STUDENTS CIRCLE
a	When I shine the beam at clear plastic, does light go through, does some light go through, is it blocked, or does it come back? Circle what you saw.	through
b	When I shine the beam at wax paper, does light go through, does some light go through, is it blocked, or does it come back? Circle what you saw.	some
c	When I shine the beam at cardboard, does light go through, does some light go through, is it blocked, or does it come back? Circle what you saw.	blocked
d	When I shine the beam at a mirror, does light go through, does some light go through, is it blocked, or does it come back? Circle what you saw.	back

WHAT TO ACCEPT

Part 1 answers are light and same. Part 2 answers are through for clear plastic, some for wax paper, blocked for cardboard, and back for a mirror. Accept a clear circle around the intended word.