Send a Sound

Students design and test a tap message that can be heard across the room.

1-PS4-4 "Design and build a device that uses light or sound to solve the problem of communicating over a distance. (SEP: 6; DCI: PS4.C, ETS1.B; CCC: Cause/Effect) Alignment may include K-2-ETS1-2"

NAME _____ DATE _____

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

1 THINK FIRST

a

light	sound	touch

b

color	size	number

2 BUILD AND TEST

PLAN	
HEARD	

ANSWER KEY

Send a Sound

GRADE 1 · 1-PS4-4

HOW TO RUN THIS PAGE

Read the questions aloud, then pair students to design and test a sound device using a pencil and a closed book. Each student chooses a tap message, sends it across the room, and checks what their partner heard. Record each student's participation and any support 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 · THINK FIRST

SAY "Your friend will face away from you across the room. You will use a pencil and a closed book to send a message with taps. Listen to each question and circle one answer."

ROW	SAY	STUDENTS CIRCLE
a	What travels from your book to your friend when you tap it with a pencil?	**sound**
b	What should your friend tell you so you can check if your tap message worked?	**number**

PART 2 · BUILD AND TEST

SAY "Set a closed book on a desk and hold a pencil to make your sound device. Draw two or three dots in PLAN to show how many taps you will send, then tap the book once for each dot while your partner faces away across the room. Ask how many taps they heard, write that number in HEARD, and tell your partner whether it matches your plan."

- Box 1 (beside PLAN): **Two or three dots showing the student's chosen tap message.**
- Box 2 (beside HEARD): **The number of taps the partner reports hearing, including 0 if none were heard.**

WHAT TO ACCEPT

Circle sound and number. Accept the partner's actual report in HEARD, even if it differs from PLAN; observe whether the student sends the planned taps and correctly says whether the two numbers match.