

Sound Cone Signals

Teacher-led build, test, and redesign activity for sound communication.

1-PS4-4 "Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. Clarification Statement: Examples of devices could include a light source to send signals..."

NAME _____

DATE _____

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

1 FIRST TEST _____

a	GO	STOP	WAIT
b	YES	NO	HELP

2 TEST AGAIN _____

a	UP	DOWN	SIT
b	HOT	COLD	WET

HOW TO RUN THIS PAGE

Students build a paper-and-paper-clip sound cone, then use it to send words to a partner at a distance. Quietly tell the sender the target word shown in the answer key, read the choices aloud to the listener, and let partners switch jobs after each part. The build, test, and change-and-test-again routine shows students using materials to make a sound communication device.

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

PART 1 • FIRST TEST

SAY “With your partner, use one sheet of paper and one paper clip to make a sound cone. Roll the paper into a cone and use the paper clip to hold it closed. Stand six big steps apart, and for each row I will quietly tell the sender a secret word.”

ROW	SAY	STUDENTS CIRCLE
a	The choices are GO, STOP, and WAIT. After your partner sends the secret word through the cone, which word did you hear? Circle it.	GO
b	The choices are YES, NO, and HELP. After your partner sends the secret word through the cone, which word did you hear? Circle it.	NO

PART 2 • TEST AGAIN

SAY “Change your sound cone by making its small opening wider or smaller. Move to opposite sides of the classroom. For each row, I will quietly tell the sender a secret word.”

ROW	SAY	STUDENTS CIRCLE
a	The choices are UP, DOWN, and SIT. After your partner sends the secret word through the cone, which word did you hear? Circle it.	SIT
b	The choices are HOT, COLD, and WET. After your partner sends the secret word through the cone, which word did you hear? Circle it.	HOT

WHAT TO ACCEPT

Answers are GO, NO, SIT, and HOT. Accept different cone sizes and openings, as long as the student helps build, test, and change the paper sound device.