



# Science Toolkit: Grade 8 Objective 1.C.1.b

Student Handout: Science: Grade 8 Objective 1.C.1.b

Standard 1.0 Skills and Processes

Topic C. Communicating Scientific Information

Indicator 1. Develop explanations that explicitly link data from investigations conducted, selected readings and, when appropriate, contributions from historical discoveries.

Objective b. Interpret tables and graphs produced by others and describe in words the relationships they show.

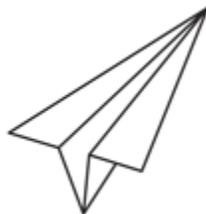
Selected Response (SR) Item

Question

Use the information below to answer the following.

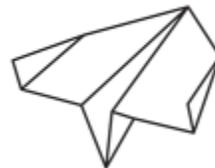
Students investigated how the design of a paper airplane affects the amount of time the airplane stays in the air and the distance the airplane travels. The students tested two airplane designs and kept all other variables constant. The students recorded their data in the tables below.

**AIRPLANE Y**



Long and Narrow

**AIRPLANE Z**



Short and Wide

**DISTANCE AIRPLANES TRAVELED**

Airplane	Trial 1	Trial 2	Trial 3
Y	600 centimeters	550 centimeters	800 centimeters
Z	150 centimeters	175 centimeters	105 centimeters

**TIME AIRPLANES WERE IN THE AIR**

Airplane	Trial 1	Trial 2	Trial 3
Y	3 seconds	2 seconds	4 seconds
Z	2 seconds	7 seconds	6 seconds

Which conclusion is most logical, based on the data?

- A. A short and wide airplane travels a greater distance than a long and narrow airplane.
- B. A long and narrow airplane travels the same distance as a short and wide airplane.

- C. A long and narrow airplane remains in the air the same amount of time as a short and wide airplane.
- D. A short and wide airplane remains in the air a greater amount of time than a long and narrow airplane.

Correct Answer

D. A short and wide airplane remains in the air a greater amount of time than a long and narrow airplane.

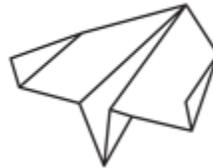
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