

After studying the finch diagram, a student concluded that the cactus finch, sharp-beaked finch, small ground finch, and medium ground finch are more closely related to each other than to the other four finch species shown.

a. Describe the evidence from the diagram the student used to come to this conclusion.

The student hypothesized that the sharp-beaked finch, small ground finch, and medium ground finch are more closely related to each other than to the cactus finch.

b. Identify one type of scientific evidence, other than physical characteristics, that would help the student evaluate the hypothesis, **and** describe specifically how that evidence could support the hypothesis.

The finches on the Galápagos Islands share many physical characteristics; however, not all organisms with similar physical characteristics are closely related.

c. Explain how two organisms that are **not** closely related could evolve similar physical characteristics.