Pond Trait Detectives

Compare organisms by using shared evidence and careful claims.

S7L1 "Obtain, evaluate, and communicate information to investigate the diversity of living organisms and how they can be compared scientifically."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the sentence that begins "Claim:" and number the next two sentences 1 and 2 to show the evidence and reasoning used to evaluate that claim.

A Careful Pond Comparison

1. At a pond-edge survey, a class compared three vertebrates: a green frog, an eastern newt, and a five-lined skink. They used field guides to identify each animal before recording traits. For every animal, the class noted skin covering, where eggs were found, and whether the adult had a tail. Using the same trait categories made the observations easier to compare. The frog had smooth, moist skin, eggs in water, and no adult tail during this survey.

2. The newt also had smooth, moist skin and eggs in water, but it had an adult tail. The skink had dry scales, eggs on land, and an adult tail. Claim: The frog and newt are more alike in the recorded traits than either animal is to the skink. Their shared skin covering and egg location support this claim. A tail alone does not settle the comparison because the newt and skink both have tails as adults.

3. These observations describe only three traits from one survey. They do not show every feature of the animals or their complete evolutionary history. To strengthen the comparison, scientists could examine additional traits, such as skeleton structure, and check findings with reliable sources. DNA evidence could add another kind of information. If stronger evidence conflicts with the claim, scientists revise the claim so it matches the evidence more accurately as investigations continue and new data appear.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which two organisms does the claim identify as most alike in the recorded traits?

2. What two shared traits support the claim?

3. Why does an adult tail alone not settle the comparison?

4. Name one kind of additional evidence that could strengthen the comparison.

3 YOUR TURN

Your own words

Choose two organisms you know or can observe. Write exactly four sentences: identify the organisms, state a comparison claim based on two observable traits, give one difference, and explain one additional trait or kind of evidence that would strengthen your comparison.

ANSWER KEY

Pond Trait Detectives

GRADE 7 · S7L1

PART 1 · READ AND MARK

Underline the sentence that begins “Claim:” and number the next two sentences 1 and 2 to show the evidence and reasoning used to evaluate that claim. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which two organisms does the claim identify as most alike in the recorded traits?	**The green frog and the eastern newt.**
2	What two shared traits support the claim?	**Both the frog and newt have smooth, moist skin and eggs found in water.**
3	Why does an adult tail alone not settle the comparison?	**The newt and skink both have adult tails, so that one trait does not show that the frog and newt are more alike overall.**
4	Name one kind of additional evidence that could strengthen the comparison.	**Accept skeleton structure, DNA evidence, or findings checked with reliable sources.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I compared an earthworm and a garden snail. Claim: They are alike in two observed traits because both have soft bodies and neither has legs. The snail has a shell, but the earthworm does not. This comparison would be stronger if I also examined other traits, such as how each reproduces.

Accept comparison claims that use two relevant, observable traits as evidence and state a reasonable difference. The final sentence should identify an additional trait, source, or kind of evidence that could improve the comparison.