Mice in Plain Sight

Use evidence to explain how a trait can help an animal survive.

3.LS4.2 "Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and reproducing."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the two fur colors, circle how many mice of each color the owl catches, and put a star beside a sentence that links fur color to survival or having young. These marks will help you gather evidence for your answers.

Which Mice Can the Owl See?

1. On a sandy island, mice of the same species can have different fur colors. Some have light tan fur, while others have dark brown fur. All of them search for seeds on pale sand at night. An owl hunts there, looking down from above. The light mice blend with the sand, but the dark mice stand out against it.

2. To see how color might matter, imagine a group of 20 mice on this island. Ten are light, and ten are dark. During several nights, an owl catches two light mice and seven dark mice. The owl hunts mice it can spot from above, so fur that stands out may put a mouse at risk. These counts are evidence about survival on pale sand.

3. Mice that escape the owl may live long enough to have young. Young mice can inherit fur color from their parents, although not every young mouse has exactly the same shade. On pale sand, light fur may help more mice survive and have young. If these same mice move onto dark stone, dark fur could help instead because it would blend with that ground.

2 ANSWER WITH EVIDENCE

Use the passage

1. How could light fur help a mouse survive on the island? Use a detail about the sand or the owl.

2. How do the numbers of mice caught support the idea that light fur helps mice survive on pale sand?

3. How could light fur help mice have young? Use evidence from the passage.

4. If the mice move onto dark stone, which fur color might help them survive and have young? Explain using a detail from the passage.

3 YOUR TURN

Your own words

In a grassy field, a fox catches four of ten slow mice but only one of ten fast mice. Write three sentences explaining how a difference in speed among mice of the same species may help them survive and have young. Use the numbers as evidence.

ANSWER KEY

Mice in Plain Sight

GRADE 3 · 3.LS4.2

PART 1 · READ AND MARK

Underline the two fur colors, circle how many mice of each color the owl catches, and put a star beside a sentence that links fur color to survival or having young. These marks will help you gather evidence for your answers. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How could light fur help a mouse survive on the island? Use a detail about the sand or the owl.	**Light fur blends with the pale sand, making a mouse harder for the owl to spot.**
2	How do the numbers of mice caught support the idea that light fur helps mice survive on pale sand?	**The owl caught two light mice but seven dark mice, so more light mice escaped.**
3	How could light fur help mice have young? Use evidence from the passage.	**Light mice blend with the sand and are less likely to be caught. Those that escape may live long enough to have young.**
4	If the mice move onto dark stone, which fur color might help them survive and have young? Explain using a detail from the passage.	**Dark fur might help because it blends with dark stone. Mice that escape the owl may live long enough to have young.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Some mice of the same species run faster than others. The fox caught four slow mice but only one fast mouse, which suggests that speed helped mice escape. Mice that escape may live long enough to have young, and some young may inherit their speed.

Accept answers that connect a trait to the conditions where mice live, explain a survival advantage, and link survival to having young. For Your Turn, look for correct use of both catch counts as evidence.