Otter Research Trail

Use focused questions and several sources to build knowledge.

4W6 "Conduct research to answer questions, including self-generated questions, and to build knowledge through investigating multiple aspects of a topic."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline Mina's research question. Number 1, 2, and 3 beside the three sources she used, so you can see how she investigated different parts of her topic.

A Question About Kelp

1. Mina watched sea otters floating in a kelp forest at an aquarium. She wanted to know more than what they eat, so she wrote a research question: "How do sea otters help a kelp forest stay healthy?" Her question gave her a focus. It also led her to investigate an animal, its habitat, and the other living things around it.

2. First, Mina used a library book to learn about sea otters' thick fur and their need for clean water. Next, she studied a web page from a national marine sanctuary. It explained that sea otters eat sea urchins. She also interviewed an aquarium educator about what happens when too many urchins are in a kelp forest.

3. Her notes showed a connection. Sea urchins eat kelp, but sea otters eat many sea urchins. When otters keep urchin numbers lower, more kelp can remain. Kelp gives shelter and food to many ocean animals. Mina used information from all three sources to answer her question, then listed each source so readers could check her work.

2 ANSWER WITH EVIDENCE

Use the passage

1. What research question did Mina write?

2. What three parts of the topic did Mina's question lead her to investigate?

3. How did the national marine sanctuary web page help Mina research her question?

4. What evidence from Mina's notes connects sea otters to a healthy kelp forest?

3 YOUR TURN

Your own words

Your teacher will help you choose a topic with accessible sources and supply the reading materials and extra paper. Plan: Choose an animal or place you want to study. Write one research question, name three aspects you would investigate, and name one source you could use for each aspect. Now investigate your three aspects in the actual materials. Record a fact and source title/page for each aspect, then use those facts to answer your research question in a short paragraph. Continue on extra paper.

ANSWER KEY # Otter Research Trail

PART 1 · READ AND MARK

Underline Mina's research question. Number 1, 2, and 3 beside the three sources she used, so you can see how she investigated different parts of her topic. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What research question did Mina write?	**How do sea otters help a kelp forest stay healthy?**
2	What three parts of the topic did Mina's question lead her to investigate?	**The sea otter, its habitat, and the other living things around it.**
3	How did the national marine sanctuary web page help Mina research her question?	**It explained that sea otters eat sea urchins.**
4	What evidence from Mina's notes connects sea otters to a healthy kelp forest?	**Sea urchins eat kelp, and sea otters eat many sea urchins. When otters keep urchin numbers lower, more kelp can remain.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Planning example only (the completed task also needs actual findings and an answer):
Topic: Monarch butterflies
Question: How do monarch butterflies survive their migration?
Aspect: Food plants, source: a library book about monarchs.
Aspect: Migration routes, source: a wildlife organization website.
Aspect: Weather dangers, source: an interview with a park ranger.
Completion record: write your actual source title and finding, then explain how the finding supports your answer. Results depend on the materials you consulted; do not invent findings.

For the passage questions, accept equivalent answers supported by the supplied text. Supply a short nonfiction book selection or source packet covering the learner's three chosen aspects, with source titles and page details. Help adjust the question/aspects to accessible evidence. Observe actual consultation; check one attributed fact per aspect and an answer that connects the findings to the learner's question. One source may cover several aspects. Do not accept a source plan as the completed inquiry. Provide extra paper and reading/recording support. Keep each learner's own question and reasoning. The planning example above does not claim that research has already occurred.