Follow the Fireflies

Model how researchers use sources and refine questions.

6W6 "Conduct research to answer questions, including self-generated questions, drawing on multiple sources and refocusing the inquiry when appropriate."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline every research question, circle each source, and put a star beside the detail that caused Jayden to refocus his inquiry.

A Better Question

1. When Jayden noticed fewer fireflies near the soccer field, he began with a broad question: "Why do fireflies need dark places?" A library book explained that many fireflies use light signals to find mates. Jayden underlined a fact but did not stop there. He wrote two smaller questions in his notebook: "Which lights shine near the field?" and "Do fireflies live there during the day?" These questions would later guide his search for useful sources at school.

2. Next, Jayden used three sources. The town parks website listed rules about turning off field lights after games. A science magazine article described how artificial light can confuse fireflies. He also emailed a park naturalist, who said that damp grass and leaf litter give fireflies places to rest during daylight. Jayden compared the sources. The website helped with local lighting, while the article and naturalist explained firefly needs. He recorded each source beside the fact it supported.

3. Jayden's first question was too broad to explain the soccer field. The parks website showed that the lights were usually off by 10 p.m., so he could not assume bright stadium lamps were the only problem. He refocused his inquiry: "How does mowing the field edge affect firefly shelter?" He found a university extension article about leaving some unmowed plants for insects. Jayden planned to check the article's date and ask the naturalist whether that idea fit this park.

2 ANSWER WITH EVIDENCE

Use the passage

1. What two smaller questions did Jayden write after reading the library book? Why would questions like these help his research?

2. How did the town parks website and the science magazine serve different purposes in Jayden's research?

3. Why was the park naturalist a useful source to add? State the information that source gave Jayden.

4. Which evidence led Jayden to refocus his inquiry, and what focused question did he create?

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 a school or community topic you want to investigate. Write one focused research question, name two different sources you would use and what each could tell you, then write one possible refocused question if your first question proves too broad. Now consult two actual sources. On extra paper, record each source's title, author/organization and page or URL, plus a relevant finding. Combine the findings in a short evidence-based answer to your question. Explain whether the evidence warrants refocusing; revise only if useful.

ANSWER KEY

Follow the Fireflies

GRADE 6 · 6W6

PART 1 · READ AND MARK

Underline every research question, circle each source, and put a star beside the detail that caused Jayden to refocus his inquiry. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What two smaller questions did Jayden write after reading the library book? Why would questions like these help his research?	**He asked which lights shine near the field and whether fireflies live there during the day. Specific questions guide a search for useful sources.**
2	How did the town parks website and the science magazine serve different purposes in Jayden's research?	**The parks website gave local information about field lights. The science magazine explained how artificial light can affect fireflies.**
3	Why was the park naturalist a useful source to add? State the information that source gave Jayden.	**The naturalist added information about firefly daytime shelter. The naturalist said damp grass and leaf litter give fireflies places to rest during daylight.**
4	Which evidence led Jayden to refocus his inquiry, and what focused question did he create?	**The website showed that field lights were usually off by 10 p.m., so lights might not be the only problem. He asked how mowing the field edge affects firefly shelter.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Planning example only (the completed task also needs actual findings and an answer):
Question: How can our school reduce lunchtime food waste? Source 1: Our cafeteria manager can explain which foods students throw away. Source 2: A city waste program webpage can describe composting rules. Refocused question: Which uneaten cafeteria foods can our school compost under city rules?
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 two distinct, readable sources relevant to the learner's question, such as book excerpts, articles or actual school records, preserving attribution and dates where available. A printed packet is sufficient. Help match or adjust the question to available evidence; do not require outside interviews or unsupervised internet access. Check actual source notes and an answer connecting evidence from both sources, rather than just listing them. Learners explain whether to keep, narrow, broaden or otherwise refocus the inquiry based on findings; a revision is not mandatory when unnecessary. 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.