

Questions That Dig

Use a model to build research questions that compare related topics.

5.T.RA.1.a "Generate questions about a self-selected topic of interest to be researched, asking probing questions to compare and contrast related topics. (I)"

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the two related topics Marcus plans to compare. Circle each question that asks him to compare ideas or explain why something happens, because these are probing research questions.

Where Does Food Waste Go?

- ① Marcus wanted to research where banana peels go after lunch. He began with a broad topic, food waste. Then he chose two related places to compare: a compost bin and a landfill. Both receive discarded food, but they work differently. A compost bin uses air and tiny living things to break food down. Food buried in a landfill breaks down much more slowly.
- ② Marcus did not stop with, "What happens to food waste?" He made his questions more focused. He wrote, "How are compost bins and landfills alike, and how are they different?" He also asked, "Why does food break down at different speeds in these places?" These questions would lead him to look for details, not just a quick fact. He could compare the role of air, moisture, and living things.
- ③ Before researching, Marcus planned another question: "What happens to the gases released when food waste breaks down?" This question connects to his first two because it asks about an effect of each place. He knew that good research questions are not yes-or-no questions. They name a clear topic and invite evidence. By comparing related topics, Marcus could discover patterns as well as important differences.

2 ANSWER WITH EVIDENCE Use the passage

1 What two related places does Marcus choose to compare?

2 Which question asks directly about both similarities and differences?

3 Which question would help Marcus investigate why food breaks down at different speeds?

4 Name two details Marcus could compare as he researches the two places.

3 YOUR TURN Your own words

Choose a topic you want to research. Name two related topics within it, then write three research questions: one that compares and contrasts them and two that ask about causes, effects, or details.

PART 1 • READ AND MARK

Underline the two related topics Marcus plans to compare. Circle each question that asks him to compare ideas or explain why something happens, because these are probing research questions. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What two related places does Marcus choose to compare?	A compost bin and a landfill.
2	Which question asks directly about both similarities and differences?	"How are compost bins and landfills alike, and how are they different?"
3	Which question would help Marcus investigate why food breaks down at different speeds?	"Why does food break down at different speeds in these places?"
4	Name two details Marcus could compare as he researches the two places.	Any two: air, moisture, and living things.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Topic: ways to make electricity. Related topics: solar power and wind power. 1. How are solar panels and wind turbines alike and different in the way they produce electricity? 2. How does cloudy or calm weather affect each source? 3. What effects do solar farms and wind farms have on nearby land and animals?

Accept any two correctly named details for question 4. For the open task, accept topics of the student's choice when the two topics are related and all three questions are clear, researchable, and include one compare-and-contrast question.