

Questions With Connections

Build focused questions for a connected investigation.

7.T.RA.1.a “Generate questions to guide research and make connections between related topics of interest, formulating questions to investigate complex topics and ideas. (I)”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the connected ideas in paragraph 1. Circle the details that make the research question in paragraph 2 focused, then number the related questions in paragraph 3.

Investigating City Heat

- ① On a summer afternoon, a city block with dark pavement can be much hotter than a nearby park. Researchers call this difference the urban heat island effect. To study it, begin with a topic, then notice connected ideas. Heat can connect to tree cover, bus stops, apartment buildings, health, electricity use, and neighborhood design. A broad topic such as city heat is only a starting point. A useful research question points toward a relationship that can be explored with evidence, not just a fact to look up.
- ② Suppose a class wants to investigate shade at bus stops. Instead of asking, “Are bus stops hot?” they could ask, “How does the amount of shade at bus stops on Oak Street relate to the surface temperature of the sidewalk at 3 p.m. in July?” This question names a place, a time, and two ideas to compare. It also suggests a way to gather information. The class could map shade, take temperature readings, and compare locations. A question becomes stronger when its details help a researcher decide what to examine.
- ③ Related questions can widen an investigation without becoming random. After studying bus-stop shade, the class might ask how shade differs near schools or whether riders wait longer at sunnier stops. These questions connect because each one examines heat, shade, and public spaces from a different angle. Researchers can organize questions by writing a main question first and placing supporting questions beneath it. They should avoid questions that assume an answer, such as “Why do planners ignore shade?” Neutral wording leaves room for evidence to lead to a conclusion.

2 ANSWER WITH EVIDENCE _____ Use the passage

- 1** The passage links apartment buildings and electricity use. Write a neutral research question that investigates how these two ideas may be connected during summer.

- 2** A group wants to study dark pavement near parks. Write a research question that includes a specific place, time, and comparison the group could investigate.

- 3** A student writes, "Do apartment buildings waste energy because they have no trees?" Rewrite this as a neutral question that compares related ideas.

- 4** A class has this main question: "How does tree cover near apartment buildings relate to summer electricity use?" Write one supporting question that investigates the same topic from a different angle.

3 YOUR TURN _____ Your own words

Choose a complex topic you care about. Write one main research question and three related supporting questions, using neutral wording and showing connections among the questions.

PART 1 • READ AND MARK

Underline the connected ideas in paragraph 1. Circle the details that make the research question in paragraph 2 focused, then number the related questions in paragraph 3. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	The passage links apartment buildings and electricity use. Write a neutral research question that investigates how these two ideas may be connected during summer.	Sample answer: How does the amount of tree cover near apartment buildings relate to their electricity use during summer?
2	A group wants to study dark pavement near parks. Write a research question that includes a specific place, time, and comparison the group could investigate.	Sample answer: How does the surface temperature of dark pavement on Maple Avenue compare with grass in Riverside Park at 3 p.m. in July?
3	A student writes, "Do apartment buildings waste energy because they have no trees?" Rewrite this as a neutral question that compares related ideas.	Sample answer: How does the amount of tree cover near apartment buildings relate to electricity use during summer?
4	A class has this main question: "How does tree cover near apartment buildings relate to summer electricity use?" Write one supporting question that investigates the same topic from a different angle.	Sample answer: How do summer indoor temperatures compare in apartments with more nearby tree cover and apartments with less nearby tree cover?

PART 3 • YOUR TURN (SAMPLE ANSWER)

Main question: How does the amount of food thrown away in the school cafeteria relate to the choices students have at lunch? Supporting question 1: Which foods are thrown away most often during lunch? Supporting question 2: How do lunch choices differ on days when students can select their own side dishes? Supporting question 3: How does the time available for lunch relate to the amount of unopened food students discard?

Accept varied questions that are neutral, focused, and investigate a relationship between related ideas from the passage. For Part 3, accept any coherent main question with three supporting questions that connect to it and could be investigated with evidence.