# Questions on the Street

Turn observations into research questions

**7.W.5.a** "Formulate a research question."

NAME _____ DATE _____

## 1 READ AND MARK

Read it twice

**YOUR JOB** Underline two kinds of evidence you could use together, then circle the two details they could connect in a research question.

### What the Sidewalk Can Tell Us

1 On a city walk, you might notice a tree beside a cracked sidewalk. The crack alone does not prove the tree caused it. A delivery truck, winter ice, or shifting soil could also damage concrete. Research begins by choosing a relationship you can investigate, not by guessing a cause. For example, a student studying a library could ask, "How does the number of open checkout desks relate to the length of the after-school line?" That question names two things to observe. Sidewalks offer other relationships to explore.

2 In one neighborhood, tree roots lift some sidewalk slabs, while other slabs stay level. City repair records can show where slabs were fixed and when, but they do not report how much room walkers have. A person with a tape measure can record the clear width left for walking at each site. The repair records and width measurements come from different sources. Planting strips, the soil spaces between streets and sidewalks, also vary in width. A notebook can hold measurements and observations from several blocks.

3 Other street details invite questions, too. On sunny afternoons, the pavement beneath tree canopies may feel cooler than pavement in full sun. A thermometer can record surface temperatures in both spots at the same time of day. Young street trees also receive different amounts of care. Volunteers keep logs of watering visits, and the parks department tracks which newly planted trees are still alive after one year. These records could help students investigate care and survival. Each comparison needs a clear place, a time period, and observations that someone could actually collect.

## 2 ANSWER WITH EVIDENCE

Use the passage

1. Write a research question that uses city repair records and measured clear widths to investigate space for walking.

2. Write a research question that connects planting-strip width with the condition of sidewalk slabs.

3. Write a research question that uses thermometer readings to compare two pavement locations.

4. Write a research question about care and one-year survival of young street trees using the records named in the passage.

## 3 YOUR TURN

Your own words

Choose a place you know other than a sidewalk or library. Write one research question that connects two measurable details, then name one way to gather evidence for each detail.

ANSWER KEY

# Questions on the Street

GRADE 7 · 7.W.5.a

## PART 1 · READ AND MARK

Underline two kinds of evidence you could use together, then circle the two details they could connect in a research question. Accept any marking that follows this job and points at the right text.

## PART 2 · ANSWERS

| # | QUESTION | ANSWER |
|---|---|---|
| 1 | Write a research question that uses city repair records and measured clear widths to investigate space for walking. | **Is the clear walking width different at sidewalk sites listed in city repair records than at sites not listed? Repair locations come from records, while clear widths must be measured.** |
| 2 | Write a research question that connects planting-strip width with the condition of sidewalk slabs. | **Are lifted sidewalk slabs more common beside narrow planting strips than beside wide planting strips?** |
| 3 | Write a research question that uses thermometer readings to compare two pavement locations. | **On sunny afternoons, how does pavement temperature beneath a tree canopy compare with pavement temperature in full sun at the same time?** |
| 4 | Write a research question about care and one-year survival of young street trees using the records named in the passage. | **Are newly planted street trees with more recorded watering visits more likely to be alive after one year than trees with fewer visits?** |

## PART 3 · YOUR TURN (SAMPLE ANSWER)

How does the number of students waiting at my bus stop relate to how many minutes late the bus arrives? I can count students when the bus is scheduled to arrive and record the difference between its scheduled and actual arrival times over ten school days.

Accept research questions that connect the specified details and could be investigated with the evidence described. For the open task, accept a place other than a sidewalk or library and a workable way to gather evidence for each detail.