

Heat Plan Blueprint

Trace how a model explanation builds from cause to action.

CCSS.ELA-Literacy.WHST.11-12.2a "Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables)..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each heading, then draw an arrow from each reference to a figure, table, or interview back to the earlier idea it supports.

Cooling the Hottest Blocks

- ① **BACKGROUND:** Cities often stay warmer than nearby rural areas because dark roofs and pavement absorb sunlight, while fewer trees provide shade and cooling through evaporation. This urban heat island effect can raise nighttime temperatures, when buildings slowly release stored heat. The problem matters most during heat waves because hot nights can prevent people from recovering. To explain a response clearly, a report should first establish this cause, then show evidence of where heat is strongest.
- ② **EVIDENCE:** Satellite temperature maps and neighborhood measurements can reveal uneven heat. [Figure 1. A map uses darker colors for hotter blocks and lighter colors for cooler parks.] Place this figure after the cause so readers can connect the pattern to surfaces and tree cover. In one Phoenix study, researchers found that tree shade lowered surface temperatures, although the size of the change varied by location and time. Evidence narrows the problem before a writer introduces solutions.
- ③ **PLAN:** After identifying the hottest blocks, city staff can prioritize tree planting, cool roofs, and shaded bus stops there. A table comparing cost, expected cooling, and maintenance needs would help officials weigh these options. Short interviews with residents could add experiences that a map cannot show. The final section should link each action to the earlier evidence, explaining why resources go first to places with little shade and high nighttime heat.

2 ANSWER WITH EVIDENCE Use the passage

1 How does the Background section prepare readers for the Evidence section?

2 Why does the model place Figure 1 after the explanation of the cause?

3 What information could resident interviews add that the map cannot show?

4 Why does the Plan section refer back to earlier evidence?

3 YOUR TURN Your own words

Write a 90-110-word mini-report about reducing cafeteria food waste. Use three headings, build from problem to evidence to plan, and include a bracketed plan for one useful graphic or multimedia source.

PART 1 • READ AND MARK

Underline each heading, then draw an arrow from each reference to a figure, table, or interview back to the earlier idea it supports. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How does the Background section prepare readers for the Evidence section?	It explains the causes and importance of urban heat before presenting evidence about where heat is strongest.
2	Why does the model place Figure 1 after the explanation of the cause?	Readers can connect the map's heat pattern to surfaces and tree cover.
3	What information could resident interviews add that the map cannot show?	Residents' experiences of heat.
4	Why does the Plan section refer back to earlier evidence?	It shows why actions and resources should be directed to the hottest, least shaded places.

PART 3 • YOUR TURN (SAMPLE ANSWER)

PROBLEM: Our cafeteria throws away unopened fruit and packaged meals each day. Waste costs money and sends usable food to landfills. EVIDENCE: A five-day tally could sort waste into unopened items, leftovers, and packaging. [Table: daily totals for each category.] The table would show which type creates the largest problem. It could also identify a time when waste rises during the week. PLAN: If unopened food is common, staff could create a share table where students place safe, unopened items. Student interviews could explain why meals are left untouched and help the school adjust menus. This response follows the tally rather than guessing about waste.

Accept answers that explain the passage's sequence from cause to evidence to action and the purpose of its visual or multimedia elements. In Part 3, accept varied school issues when headings, logical progression, and a useful visual or multimedia plan are present.