

Heat Plan Blueprint

Analyze how problem-and-solution organization supports an informational purpose.

6.9.B “analyze how the use of text structure contributes to the author's purpose;”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the part that explains a challenge, circle each proposed response, and number the paragraphs in the order the author presents these ideas. Use your marks to analyze how the order supports the author's purpose.

Cooling Down a City

- ① On a sunny day, city blocks can feel much hotter than nearby parks. Dark roofs, streets, and parking lots absorb sunlight and release heat slowly. Trees and grass cool the air through shade and evaporation, but crowded neighborhoods may have few open spaces. This extra warmth, called the urban heat island effect, can make homes uncomfortable and raise the need for air conditioning. During heat waves, the effect can also increase health risks for people who work or live without reliable cooling.
- ② Cities can reduce this problem by changing surfaces and adding plants. For example, a cool roof is painted or covered with light material that reflects more sunlight than a dark roof. Planting street trees gives walkers shade, while small parks create cooler places to rest. Some communities also replace sections of pavement with materials that let rainwater soak into the ground. These steps do not erase every hot day, but they can lower local temperatures and make outdoor spaces safer.
- ③ These changes can bring other benefits as well. Trees may improve air quality by trapping some particles on their leaves, and surfaces that absorb rain can reduce runoff after storms. Cooling projects cost money and need care over time, so cities must choose plans that fit each neighborhood. Still, starting with the heat problem and then showing workable responses helps residents see why planners consider roofs, pavement, and green spaces together when deciding how to protect people during summer heat.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How does paragraph 1 prepare readers for the information in paragraph 2?

2 Why does the author place examples such as cool roofs, trees, parks, and new pavement after describing the heat problem?

3 What does paragraph 3 add to the problem-and-solution structure?

4 What is the author's main purpose, and how does the problem-and-solution structure help achieve it?

3 YOUR TURN _____ Your own words

Choose a problem in a school or community. Write 4 or 5 sentences using a problem-and-solution structure, including two solutions and a final sentence that explains how the structure supports your purpose to inform or persuade readers.

PART 1 • READ AND MARK

Underline the part that explains a challenge, circle each proposed response, and number the paragraphs in the order the author presents these ideas. Use your marks to analyze how the order supports the author's purpose. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How does paragraph 1 prepare readers for the information in paragraph 2?	It explains the city heat problem and its risks, helping readers understand why cooling solutions are needed.
2	Why does the author place examples such as cool roofs, trees, parks, and new pavement after describing the heat problem?	The examples act as responses to the problem, showing readers practical ways cities can reduce heat.
3	What does paragraph 3 add to the problem-and-solution structure?	It explains added benefits, notes that plans must fit neighborhoods, and connects the solutions to community planning.
4	What is the author's main purpose, and how does the problem-and-solution structure help achieve it?	The author aims to inform readers about urban heat and build support for cooling plans. The structure first shows why heat is harmful, then offers workable responses and their benefits.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Our school cafeteria throws away many unopened packaged food items each day. A share table could let students place unopened items where others may take them, and clear signs could help students choose only what they will eat. These steps could reduce waste and help save food. By presenting the waste problem before the solutions, I inform readers and show why the changes are needed.

Accept responses that identify the problem, solutions, and the effect of their order on the author's purpose. For Part 3, accept any realistic problem-and-solution response with two solutions and a clear explanation of how the organization supports informing or persuading.