

Heat Chain

Organize a developed explanation so each paragraph advances the reader's understanding.

11.W.1.A.ii "Write extended pieces that: Adopt an organizational structure that clarifies relationships among ideas and concepts."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the one sentence that announces the passage's plan. In the margin, label paragraph 2 **Cause** and paragraph 3 **Effect/Response** to show how the writer groups connected ideas.

Why City Blocks Stay Hot

- ① On a summer afternoon during a heat wave, a city block can feel far hotter than a nearby park. Dark roofs and pavement absorb sunlight, while buildings restrict breezes and leave little room for shade. This pattern, called the urban heat island effect, affects health, energy use, and daily work. To explain the problem, this report first traces how city surfaces store heat, then considers the effects of that stored heat on people and services, and finally considers responses matched to those causes and effects.
- ② First, materials create the heat difference. Asphalt, brick, and dark roofing absorb more solar energy than grass or tree cover. After sunset, these dense surfaces release heat slowly, so blocks may remain warm through the night. Tall buildings can also trap warm air in narrow streets. These conditions are strongest on cloudless, low-wind days. Because fewer trees cool the air through shade and evaporation, a neighborhood with extensive pavement stores and holds more heat than a greener area. The causes work together rather than separately.
- ③ The stored heat produces connected consequences. Warmer buildings prompt residents and businesses to use more air conditioning, increasing electricity demand. If power plants burn fossil fuels to meet that demand, the added emissions can worsen air pollution. Heat also places outdoor workers, such as delivery drivers and construction crews, under greater physical strain. Cities can interrupt this chain by planting and protecting trees, installing reflective roofs, and creating shaded transit stops. Each response either limits heat absorption or helps people cope with hotter conditions more safely.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Which sentence gives the reader a roadmap for the passage? What three topics does it name, in order?

2 How does paragraph 2 organize its explanation of why city blocks retain heat?

3 What cause-and-effect chain does the sentence beginning with “If power plants” establish?

4 Why does the writer place the city responses after the consequences in paragraph 3?

3

YOUR TURN

Your own words

Write a 180–240 word explanation for a neighborhood newsletter about urban heat, using the supplied passage. Develop three connected paragraphs: causes, consequences, and responses. Choose a clear opening and conclusion, group related ideas, and use transitions that explain relationships. Paraphrase rather than copy. Then explain one organizational choice.

Paragraph 1 • Causes

Introduce the problem and develop the connected causes. Plan roughly 60–80 words here; the 180–240 word requirement applies to the three paragraphs together.

Paragraph 2 • Consequences

Explain how the causes lead to effects on people or services. Connect this paragraph to the first with a meaningful transition; do more than add “next.”

Paragraph 3 · Responses and conclusion

Connect responses to specific causes or consequences, then close the explanation. Check the full three-paragraph word count and revise unclear connections.

Explain the organization

In 2-3 sentences, identify one grouping or sequencing choice and explain how it clarifies a relationship for readers. Keep this explanation outside the composition word count.

PART 1 • READ AND MARK

Underline the one sentence that announces the passage's plan. In the margin, label paragraph 2 **Cause** and paragraph 3 **Effect/Response** to show how the writer groups connected ideas. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Which sentence gives the reader a roadmap for the passage? What three topics does it name, in order?	The final sentence of paragraph 1. It names how surfaces store heat, the effects on people and services, and ways cities can reduce the problem.
2	How does paragraph 2 organize its explanation of why city blocks retain heat?	It moves through connected causes: heat-absorbing materials, slow nighttime heat release, trapped warm air, and less cooling from trees. It ends by stating that the causes work together.
3	What cause-and-effect chain does the sentence beginning with "If power plants" establish?	More air conditioning raises electricity demand. If fossil-fuel power plants meet that demand, their added emissions can worsen air pollution.
4	Why does the writer place the city responses after the consequences in paragraph 3?	The placement shows that the responses address the problems just described. The final sentence clarifies that responses either reduce heat absorption or help people cope with hotter conditions.

PART 3 · YOUR TURN (SAMPLE ANSWER)

A neighborhood's heat problem begins with connected features of its built environment. Roofs and pavement absorb sunlight, while closely spaced buildings can reduce air movement. When trees are scarce, less shade reaches those surfaces and less water evaporates from vegetation. The problem can continue after sunset because stored heat leaves dense materials gradually. Understanding this combination explains why a paved block can remain uncomfortable even when daylight has ended.

Because that heat persists around homes and streets, it affects more than outdoor comfort. Warmer buildings can increase demand for air conditioning, putting additional pressure on the electricity supply. If fossil-fuel plants meet that demand, associated emissions can add to air pollution. People whose work keeps them outdoors also face greater heat strain. These linked effects connect the neighborhood's surfaces with energy use and daily activities.

Responses should address the links in this chain. Protecting trees and adding suitable shade can reduce direct heating and improve waiting areas. Reflective roofs can limit the solar energy a building absorbs. These measures have different purposes, so a neighborhood should match them to its conditions rather than treat them as interchangeable. Moving from causes to consequences and then to responses helps readers see why a proposed change could matter.

Organization note: Grouping the energy and outdoor-work effects after the causes shows what follows from stored heat. Placing responses last lets each proposal answer a problem readers already understand.

The model has three developed paragraphs, followed by a separate organization note. Count only the three-paragraph composition toward 180–240 words. Accept other accurate groupings, transitions, and conclusions that preserve clear relationships; a rigid five-paragraph essay is not required. Do not reward transition words alone when the ideas remain disconnected. The transfer uses information already supplied in the reading, so it does not require unsupported claims about an unrelated topic.