From River to Tap

Track how an explanatory text guides a reader through a process.

7.P.EICC.2.c "Explain and learn concepts and processes by interpreting and constructing texts. (I/C)"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline words or phrases that signal a step in the process. Circle one sentence in each paragraph that explains why a step is needed or what it accomplishes.

How Drinking Water Is Treated

1. Before water reaches a city tap, it often travels through a treatment plant. Water from a river, lake, or underground source may carry leaves, soil, tiny organisms, and dissolved chemicals. First, workers and machines remove large debris with screens. Plant operators then test the incoming water. Those tests help them decide which treatment steps and amounts of chemicals are needed. The goal is not simply clear-looking water. The goal is water that meets health rules before it enters pipes.

2. Next, a process called coagulation helps small particles clump together. Operators add carefully measured substances that reduce the electrical repulsion between particles, allowing them to stick. The larger clumps, called floc, form as the water is mixed slowly. During sedimentation, gravity pulls much of this floc to the bottom of a tank. Water near the top then moves through filters made of materials such as sand, gravel, or charcoal. Each stage removes different kinds or sizes of unwanted material.

3. Finally, treatment plants disinfect water to reduce harmful germs. Chlorine compounds, ozone, or ultraviolet light can be used, depending on the system. Some plants make additional adjustments, such as changing acidity or adding fluoride where local rules require it. Operators test water throughout treatment and again before distribution. This repeated testing matters because water conditions can change after rainstorms or seasonal shifts. Once the water meets required standards, pumps send it through mains, and smaller pipes carry it to homes, schools, and businesses.

2 ANSWER WITH EVIDENCE

Use the passage

1. Why does the writer contrast clear-looking water with water that meets health rules?

2. How do tests of the incoming water affect the treatment process?

3. How does the text show the connection between coagulation and sedimentation?

4. Identify two choices the writer uses to make this process easier to follow. Explain how each choice helps the reader.

3 YOUR TURN

Your own words

Write a three-sentence explanatory text about how you test and improve a paper airplane. Use at least two sequence words, a sentence that tells why you make a change, and a specific measurement or observation.

ANSWER KEY

From River to Tap

GRADE 7 · 7.P.EICC.2.c

PART 1 · READ AND MARK

Underline words or phrases that signal a step in the process. Circle one sentence in each paragraph that explains why a step is needed or what it accomplishes. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Why does the writer contrast clear-looking water with water that meets health rules?	**The contrast shows that water must be safe, not just look clean.**
2	How do tests of the incoming water affect the treatment process?	**The tests help operators choose the needed treatment steps and chemical amounts.**
3	How does the text show the connection between coagulation and sedimentation?	**Coagulation forms clumps called floc, and sedimentation uses gravity to pull much of the floc to the bottom of a tank.**
4	Identify two choices the writer uses to make this process easier to follow. Explain how each choice helps the reader.	**The writer uses sequence words such as "First," "Next," and "Finally" to show order. The writer also explains terms and causes, such as defining floc and explaining that gravity pulls it downward.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

First, fold an airplane from one sheet of paper and fly it three times from the same starting line. Next, measure each flight with a tape measure, then bend the back edges up 1 centimeter if the plane drops quickly because the raised edges can help it glide. Finally, fly it three more times and compare the average distance to decide whether the change improved the design.

Accept equivalent explanations that accurately connect the writer's details to the process. For Part 3, accept varied airplane-testing methods if the response has three sentences, clear sequence, a reason for a change, and a specific observation or measurement.