Beyond the First Speech

Trace biological and environmental influences on development

P.1.8 "Explain how nature and nurture influence human development."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline possible biological influences on Nia, circle experiences that could shape her development, and write 1 beside a place where the two may work together. These marks will help you explain why her development cannot be traced to just one cause.

Nia Finds Her Voice

1. When fourteen-year-old Nia stands to speak at debate club, her heart races and her voice shakes. She wants to make her case, yet she worries she will forget her opening line. Human development includes changes in how people think, feel, and act over time. Nature refers to biological influences, including inherited genes and the body's responses. Some people may inherit tendencies that make them more sensitive to stress. Nia's racing heart shows a physical response, but that single moment cannot reveal whether an inherited tendency, a past experience, or both helped produce it.

2. Nurture refers to influences from a person's experiences and surroundings. After the meeting, Nia's coach invites her to practice with a small group before speaking to the whole club again. Her teammates listen without interrupting and offer specific suggestions. Over several weeks, Nia learns where to pause and how to recover when she loses her place. Her heart may still race, but practice could help her respond to that feeling differently. In this way, an experience can shape how someone handles a physical reaction. It does not have to erase the reaction to change Nia's behavior.

3. Researchers study nature and nurture by looking for patterns across many people, not by judging one speech. For example, identical twins share nearly all their DNA. Comparing twins who grew up in different settings can offer clues about biological and environmental influences. Still, even twins raised apart can have some experiences in common, and their surroundings cannot be measured perfectly. Such comparisons cannot assign an exact percentage of one person's confidence to genes. To understand Nia's development, a researcher would consider both her possible biological tendencies and what happened as she practiced over time.

2 ANSWER WITH EVIDENCE

Use the passage

1. How might nature influence Nia's reaction when she first speaks at debate club?

2. How might Nia's coach and teammates influence her development?

3. Explain how Nia's physical reaction and her practice might work together to shape her behavior.

4. Why could a study of identical twins raised apart not tell a researcher exactly how much of one person's confidence came from genes?

3 YOUR TURN

Your own words

Invent a teenager learning a skill other than public speaking. In four sentences, explain one possible biological influence, one influence from the teen's surroundings, how they might work together, and why neither alone fully explains the teen's progress.

Beyond the First Speech

PART 1 · READ AND MARK

Underline possible biological influences on Nia, circle experiences that could shape her development, and write 1 beside a place where the two may work together. These marks will help you explain why her development cannot be traced to just one cause. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How might nature influence Nia's reaction when she first speaks at debate club?	**An inherited tendency toward stress sensitivity might contribute to her racing heart, though the moment alone cannot show whether she has that tendency.**
2	How might Nia's coach and teammates influence her development?	**The coach gives Nia a chance to practice in a small group, and her teammates offer suggestions. These experiences help her learn to pause and recover when she loses her place.**
3	Explain how Nia's physical reaction and her practice might work together to shape her behavior.	**Nia's heart may still race, but practice could help her respond to that feeling differently when she speaks.**
4	Why could a study of identical twins raised apart not tell a researcher exactly how much of one person's confidence came from genes?	**Twins raised apart can still share experiences, and researchers cannot measure their surroundings perfectly.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Kai is learning to juggle, and inherited differences in coordination might affect how quickly he handles the first toss. His neighbor lends him soft balls and practices with him after school. Repeated practice helps Kai adjust his timing even when a toss feels difficult. Neither biology nor practice alone fully explains his progress because both can influence how he learns.

Accept plausible biological influences stated as possibilities, not proven causes. Responses should explain how an experience could affect the way a person develops or responds to a biological influence.