Behind the DNA Ad

Evaluate a home DNA test claim before making a decision

BIO.2.c "Obtain, evaluate, and communicate information regarding how DNA and genetic technology apply to daily life."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two limits of the kit's health claim, circle two ways Maya checks its evidence, and number two privacy choices she considers before ordering.

What Can a Home DNA Test Tell You?

1. At the pharmacy, Maya sees an ad for a mail-in DNA kit: "Find out if you will get type 2 diabetes." She wonders whether to buy it for her family. A customer usually sends a saliva sample, and a lab reads selected positions in the DNA. Some positions contain variants associated with a higher or lower chance of disease in the groups studied. But type 2 diabetes is influenced by many genes, food, activity, and other factors. A result that reports increased risk is not a diagnosis, and a result showing no flagged variants does not mean zero risk.

2. Maya checks the company's sample report instead of relying on the ad. It lists the variants tested and explains that its estimate comes from studies of particular populations. An estimate may be less reliable for someone whose ancestry is not well represented in those studies. She also reads a public health agency's guide, which says that home test results should not replace medical care. If a result raises a health concern, a health professional can review personal and family history and discuss whether a clinical test is appropriate. This comparison helps Maya separate evidence from a sales claim.

3. Before ordering, Maya reads the consent and privacy pages. The company may keep her sample or genetic data and may offer to share de-identified data with researchers if she agrees. De-identified data have names removed, but that does not guarantee complete privacy. She looks for choices about research sharing, sample storage, and data deletion; deleting stored data may not erase information already shared. Maya tells her family, "This kit might offer a clue, not a forecast. Let's check what it tests, ask a health professional about any worrying result, and decide whether its privacy terms work for us."

2 ANSWER WITH EVIDENCE

Use the passage

1. Which details in the passage show why the ad's promise is too certain? Explain how you would correct its claim.

2. Maya uses both a sample report and a public health guide. What does each source help her check about the company's health claim?

3. A friend says, "The kit found no flagged variants, so I can't get type 2 diabetes." Write a one-sentence correction using passage evidence.

4. If Maya wants to share her data for research, what two privacy questions should she ask before agreeing, and why might deleting data later not fully reverse sharing?

3 YOUR TURN

Your own words

Your friend sees an ad claiming a mail-in DNA kit can predict whether they will become a star athlete. Write a four-sentence message that evaluates the promise, names two checks you would make before trusting it, and explains one privacy choice.

ANSWER KEY

Behind the DNA Ad

PART 1 · READ AND MARK

Underline two limits of the kit's health claim, circle two ways Maya checks its evidence, and number two privacy choices she considers before ordering. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which details in the passage show why the ad's promise is too certain? Explain how you would correct its claim.	**The kit reads selected DNA positions, while many genes and other factors affect type 2 diabetes. The ad should say that the test may estimate risk, not predict whether someone will get the disease.**
2	Maya uses both a sample report and a public health guide. What does each source help her check about the company's health claim?	**The sample report identifies the variants tested and the populations behind the estimate. The public health guide helps her check whether the result should guide medical decisions on its own; it should not.**
3	A friend says, "The kit found no flagged variants, so I can't get type 2 diabetes." Write a one-sentence correction using passage evidence.	**No flagged variants do not mean zero risk because the kit checks selected DNA positions, and other genes and factors also affect type 2 diabetes.**
4	If Maya wants to share her data for research, what two privacy questions should she ask before agreeing, and why might deleting data later not fully reverse sharing?	**She should ask whether sharing is optional and how long the company stores her sample or data. Deletion may not erase information already shared.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

An ad that promises to predict your athletic future from a DNA kit sounds too certain. Ask which variants it checks and whether its studies include people with ancestry like yours. Compare its claim with guidance from a public health agency, since a DNA result is a clue rather than a guarantee and training also matters. Before sending saliva, read the consent terms and decide whether you want your data shared for research.

Accept other accurate corrections that distinguish a risk estimate from a certain outcome. For the open task, look for two concrete ways to check the claim and a specific choice about genetic data or sample storage.