Measuring Minds

Compare intelligence tests and examine changing scores over time

SS24.P.13a "Describe different types of intelligence tests and explain the Flynn effect."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each test or test format, and circle a detail that shows what makes it useful or limited. Number the sentences that explain the Flynn effect and why test norms change.

What Does an IQ Score Tell Us?

1 A school psychologist wants to learn how a student reasons, not just what the student memorized in class. Intelligence tests sample thinking skills and compare performance with that of people in the same age group. On the individually administered Stanford-Binet test, a trained examiner gives tasks involving areas such as verbal reasoning and working memory. The Wechsler scales are also given one person at a time, but report separate scores for areas such as verbal comprehension and processing speed as well as an overall score. Neither test captures every useful ability, such as creativity or persistence.

2 Some testing situations call for different tools. Raven's Progressive Matrices asks people to choose the missing piece in visual patterns; it relies less on spoken language than a vocabulary task does. It is still affected by schooling and familiarity with test tasks, so it is not a culture-free measure. Group intelligence tests can be given to many people at once, often using the same written or digital directions. They are efficient for screening, but an individual session lets an examiner observe how someone approaches each task. A score also depends on the specific test and its comparison group.

3 Now imagine a test kept its old scoring guide for decades. Psychologist James Flynn noticed that, across many countries and decades, later groups often scored higher than earlier groups on the same test questions. This pattern is called the Flynn effect. Because an IQ score is compared with scores from a reference group, test makers update norms using newer samples. If old norms remained, later test takers could appear unusually high compared with people tested long ago. Researchers debate causes, including changes in education and living conditions. The trend is not universal: gains have slowed or reversed in some places and periods.

2 ANSWER WITH EVIDENCE

Use the passage

1. How are the Stanford-Binet and Wechsler scales alike in how they are given? What kind of scores does the passage highlight for the Wechsler scales?

2. How does Raven's Progressive Matrices differ from a vocabulary task, and why should its score still be interpreted with care?

3. Why might a school choose a group intelligence test for screening, and what could an individual session add?

4. Explain the Flynn effect and why test makers update IQ test norms.

3 YOUR TURN

Your own words

A counselor meets a student who recently began learning English and has an IQ report scored with norms from 30 years ago. In four sentences, choose a test from the passage, explain why it suits this student, name a limitation and a follow-up step, and explain why the old score needs caution using the Flynn effect.

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PART 1 · READ AND MARK

Underline each test or test format, and circle a detail that shows what makes it useful or limited. Number the sentences that explain the Flynn effect and why test norms change. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How are the Stanford-Binet and Wechsler scales alike in how they are given? What kind of scores does the passage highlight for the Wechsler scales?	**Both are given to one person at a time. The Wechsler scales report scores for separate skill areas as well as an overall score.**
2	How does Raven's Progressive Matrices differ from a vocabulary task, and why should its score still be interpreted with care?	**It uses visual patterns and relies less on spoken language. Schooling and familiarity with test tasks can still affect performance.**
3	Why might a school choose a group intelligence test for screening, and what could an individual session add?	**A group test efficiently screens many people at once. An individual session lets an examiner observe how a person approaches tasks.**
4	Explain the Flynn effect and why test makers update IQ test norms.	**Later groups have often scored higher than earlier groups on the same test questions. Updated norms compare test takers with a more recent group rather than making their scores appear unusually high against an older group.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would use Raven's Progressive Matrices because its visual patterns rely less on spoken language than vocabulary tasks. Its score can still reflect the student's schooling and familiarity with tests. I would arrange an individual session to observe how the student solves problems and use current norms when interpreting results. The old score may look unusually high because later groups often score better on the same questions than the earlier group used to set its norms.

Accept another test choice if the student explains how it fits this situation and gives a sound limitation and follow-up step. Explanations of the Flynn effect should describe a pattern across groups and time, not claim that every individual becomes more intelligent.