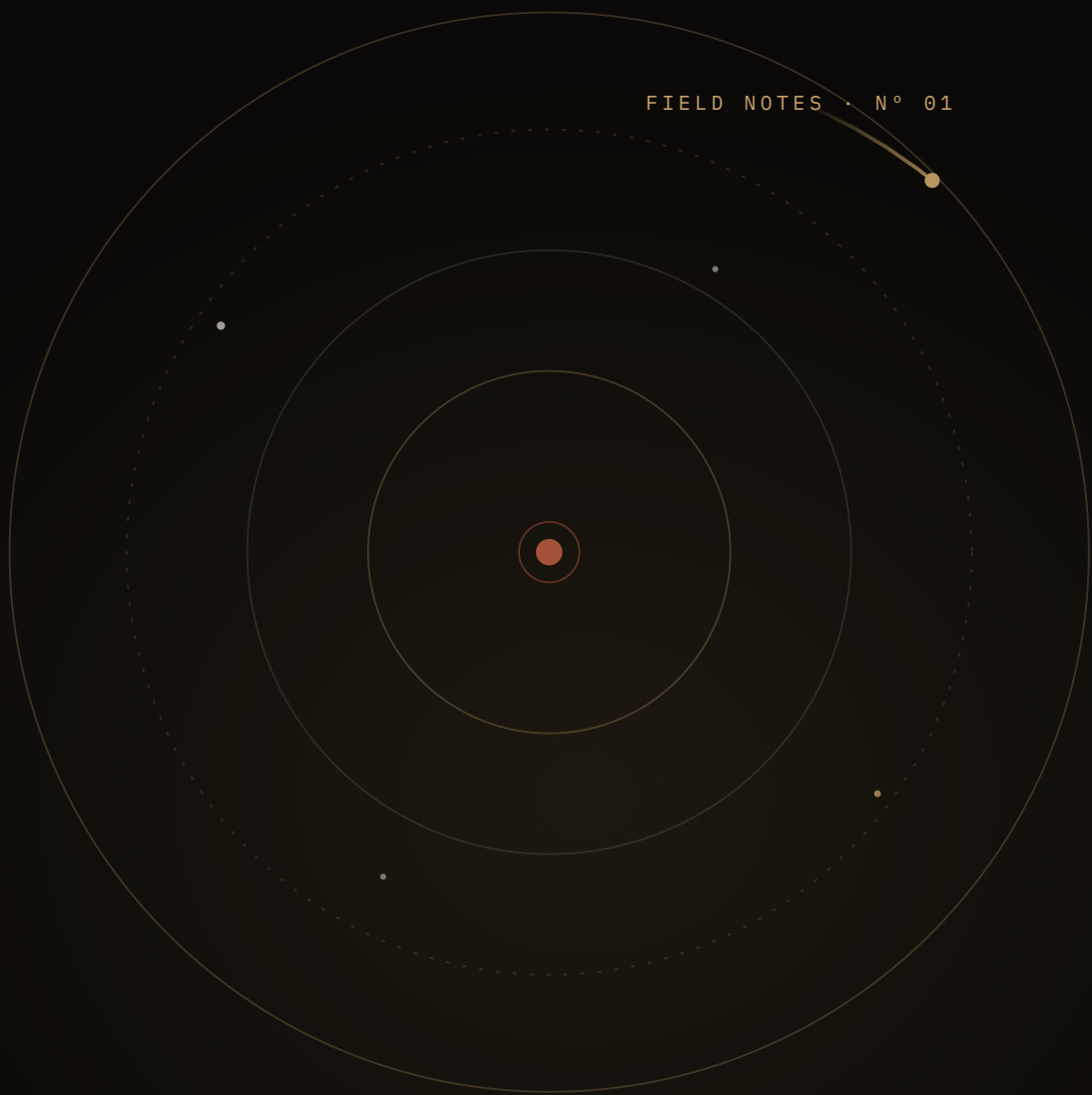




● A FREE GUIDE FOR THE CURIOUS

The *shape* of your mind.

A short, friendly field guide to what intelligence tests actually measure, where scores come from, and what yours can — and can't — tell you.

Intelligence isn't one thing.

Modern cognitive tests don't measure a single mysterious quantity. They sample **several distinct abilities** — some fast, some deep, some verbal, some visual — and your profile across them is a **shape, not a number**. Here are the six you'll meet most often.



D • 01

Fluid reasoning

Solving problems you've never seen before — spotting the rule in a pattern with no prior knowledge to lean on.

FEELS LIKE *"Which tile completes the grid?"*

3729

D • 02

Working memory

Holding information in mind while you use it — your brain's scratchpad, and one of its tightest bottlenecks.

FEELS LIKE *"Repeat these digits... backwards."*



D • 03

Processing speed

How quickly you can scan, match and decide on simple material — accuracy under the clock.

FEELS LIKE *"Find every Δ in this grid. Go."*

Aa

D • 04

Verbal comprehension

Word knowledge and verbal logic — the crystallized library your brain has been indexing your whole life.

FEELS LIKE *"Physician is to diagnosis as judge is to...?"*



D • 05

Visual-spatial

Rotating, folding and assembling shapes in your head — the ability behind maps, parking and flat-pack furniture.

FEELS LIKE *"Which piece completes the figure?"*

2 • n ?

D • 06

Quantitative reasoning

Seeing structure in numbers — sequences, ratios and relationships, not memorised formulas.

FEELS LIKE *"2, 6, 18, 54... what comes next?"*

≈ 4

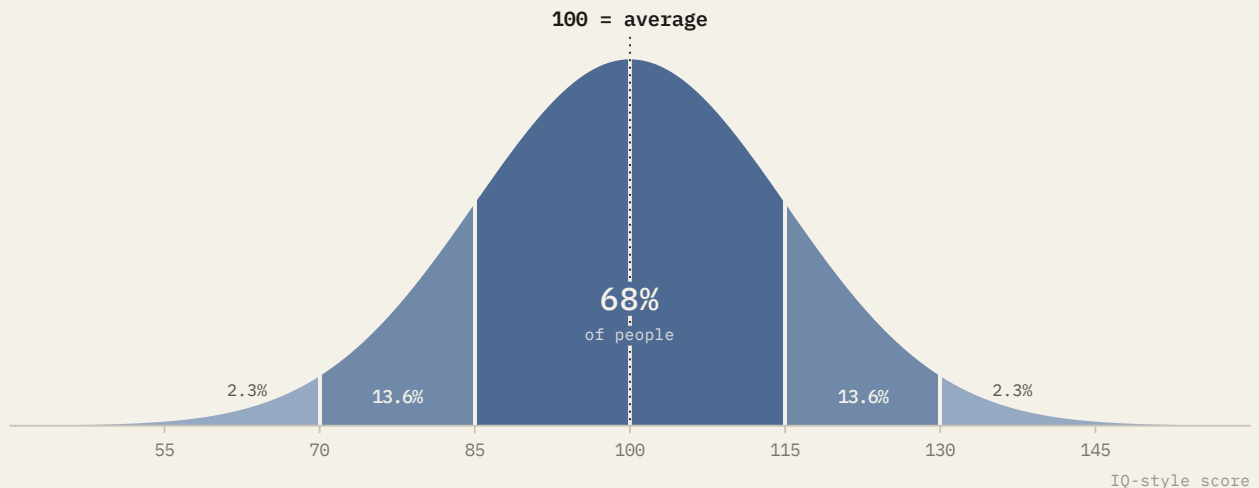
The chunks an average working memory holds at once. Not the " 7 ± 2 " of legend — modern estimates put the real limit closer to four (Cowan, 2001). It's why phone numbers come grouped.

Where scores land.

IQ-style scores are **scaled, not counted**: performance is placed on a curve where **100 is average by definition** and each step of 15 points is one standard deviation. That single convention makes every score below instantly readable.

The distribution of IQ-style scores

Share of the population by score band · mean 100, standard deviation 15



THE AVERAGE

100

By definition — the scale is re-centred on the population midpoint.

ONE STEP

15 pts

One standard deviation — the ruler the whole curve is drawn with.

SCORE 85–115

68%

Roughly two of every three people land within one step of average.

SCORE ABOVE 130

1 in 44

Two steps above average — the top ≈2.3% of the curve.

The same fact, two languages

Every score is a percentile wearing different clothes — use whichever reads better.



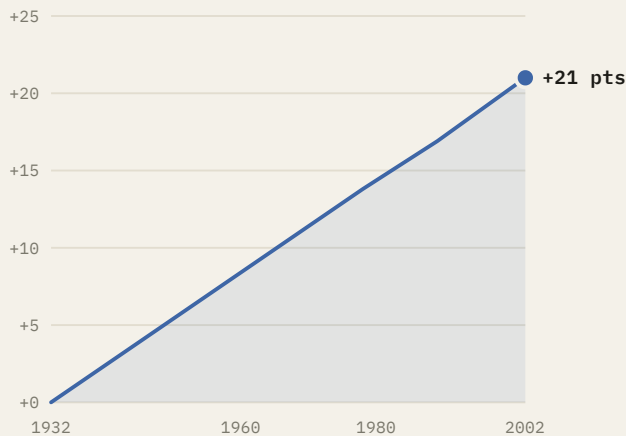
MindSpan scores use this same convention (mean 100, SD 15), estimated statistically rather than from clinical norm tables — treat them as an educational estimate, not a clinical result.

Your score isn't carved in stone.

Two of the most famous findings in cognitive science are about **change**: whole populations drift upward across generations, and different abilities age on **completely different clocks**.

The Flynn effect

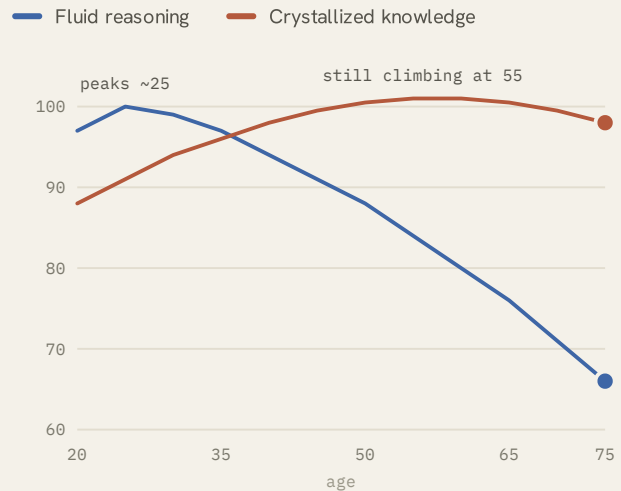
Cumulative gain in average U.S. test performance since 1932



Raw performance rose ≈ 3 points per decade for 70 years, so tests are re-normed each generation to keep the average at 100. *Flynn (1984, 2012).*

Two kinds of smart, two clocks

Relative ability by age, indexed to the fluid peak = 100



Novel-problem ability peaks in the mid-20s; accumulated knowledge keeps climbing into the 60s. Stylized after *Horn & Cattell (1967); Salthouse (2019).*

Day to day, your measured score also moves with...

- a Sleep.** One short night measurably drags working memory and attention — test rested, not wired.
- b Anxiety.** Test stress eats the very working memory the test is measuring. A calm room is worth points.
- c Practice.** Retaking similar items inflates scores a few points — it's why MindSpan rotates you through fresh test forms.
- d Time of day.** Most people's attention peaks late morning; owls and larks differ. Pick your hour.
- e Distraction.** Every notification fragments attention for minutes afterwards. Full screen, phone face-down.
- f Effort & stakes.** Scores rise when people care about the result — a casual click-through isn't your ceiling.



Brain-training apps proven to raise general intelligence. Training reliably improves the practiced task — broad transfer to everything else remains unproven (Simons et al., 2016). Tests measure the shape; they don't reshape it.

What a score *can* — and can't — tell you.

A GOOD TEST CAN...

- + **Locate you on the curve** — a fair estimate of how your performance today compares with other adults.
- + **Reveal your shape** — the spread across domains is usually more interesting than the headline number.
- + **Track change** — sleep, stress and training all show up when you re-test on a fresh form.
- + **Make you curious** — the fastest way to learn how your mind works is to watch it work.

NO TEST CAN...

- **Measure your worth** — creativity, judgment, humour and kindness sit entirely outside the curve.
- **Predict your story** — population statistics say very little about any one life.
- **Pin you to one number** — scores wobble day to day; treat any single result as an estimate with error bars.
- **Replace a clinician** — online tests are educational tools, not diagnoses.

YOUR MOVE

Ready to see your *shape*?

MindSpan's tests are built in the style of the classic instruments — timed, multi-domain, and scored on the curve you just read about.

Raven's-style matrices	pure fluid reasoning	36 items • 20 min
Stanford-Binet-style	five domains, one profile	50 items • 45 min
WAIS-style	the full four-index workout	48 items • 45 min

Your welcome grant of **1,000 neurons** covers your first tests.

mindspanlabs.app

SOURCES & FURTHER READING

Cowan, N. (2001). The magical number 4 in short-term memory. *Behavioral and Brain Sciences*. · Flynn, J. R. (1984). The mean IQ of Americans: massive gains 1932–1978. *Psychological Bulletin*; and (2012) *Are We Getting Smarter?* · Horn, J. & Cattell, R. (1967). Age differences in fluid and crystallized intelligence. *Acta Psychologica*. · Salthouse, T. (2019). Trajectories of normal cognitive aging. *Psychology and Aging*. · Simons, D. et al. (2016). Do “brain-training” programs work? *Psychological Science in the Public Interest*.

This guide — and every MindSpan test — is an educational tool for self-exploration, not a clinical instrument. For a formal assessment, see a licensed psychologist.