

Name _____ Date _____ Time taken _____

What this sheet trains

Divided attention - holding a second rule in mind while your main attention is busy elsewhere. This is the skill behind listening to a teacher while taking notes, or checking your working while solving the next step.

Strategy: anchor and sweep. Give the main task your focus and let the second task run as a quick, automatic check - do not swap your full attention back and forth.

1 Read and tally

Main task: read the passage once. Second task: the counting rule below.

Counting rule

Every time you read the word continent or continents, make one tally mark in the box at the foot of the page. Do not go back and re-read. One pass only.

In 1912 a German meteorologist, Alfred Wegener, proposed that the continents had once been joined in a single mass and had since moved apart. His evidence was a pattern, and a good one. The Atlantic coastlines of Brazil and west Africa fit together; mountain belts and rock sequences run off one continent and resume on another; the same fossil plant, *Glossopteris*, is found in South America, Africa, India, Australia and Antarctica; and glacial scratches in now tropical India point outward from an ice sheet that must have sat where no ice could form today. Each of these facts was known. What Wegener added was the claim that the continents themselves had changed position.

The reception was hostile, and not merely from prejudice. A theory of motion needs a cause, and Wegener's was weak: he had each continent ploughing through the rock of the ocean floor, driven by tidal forces and the bulge of the rotating earth. Harold Jeffreys showed by straightforward calculation that such forces fall short of the task by several orders of magnitude, and that a continent dragged through the sea floor would deform long before the floor gave way. Faced with a striking correlation and an impossible mechanism, most geologists preferred alternatives, such as sunken land bridges, that moved no continent and broke no physics. The missing cause arrived only in the 1950s, through rock magnetism and then sea-floor spreading.

The episode is usually retold as dogma crushing a visionary outsider, and that reading is lazy. Wegener's critics were doing their job. A correlation without a workable mechanism is a puzzle, not a theory, and a discipline that accepted every well-patterned conjecture on the strength of its pattern alone would be unusable. The honest moral is less flattering to hindsight: Wegener was right that the continents move while being wrong about the only reason he offered for believing it, and the history of science has no settled way of crediting that. Treating him as a martyr quietly licenses the view that a strong pattern should be enough.

Tally here - one mark per continent or continents

Make the marks as you read, then write your total before turning the page.

Total

1 Questions - cover the passage first

Answer from memory. Do not look back at the passage.

My tally total

From page 1

Q1. What kinds of evidence did Wegener use to argue that the continents had once been joined?

Q2. Why did a weak mechanism matter so much to his critics, given the strength of his pattern?

Q3. Why did sea-floor spreading settle the question when Wegener's own evidence had not?

Q4. The writer calls the martyr version lazy. What does that argument assume about what a theory must supply?

2 Grid sweep with a running count

Main task: cross out targets. Second task: keep a count in your head.

Rules - read both before you start, then start the timer

Main: cross out every number that is a multiple of 13.

Second: count - silently, no marks - how many numbers end in 2. Write the total in the box only when you have finished the whole grid.

790	570	559	295	288	435	820	512	199	532	908	903
511	593	550	944	156	718	939	463	257	184	705	132
905	476	180	201	935	426	755	175	559	467	634	847
325	951	759	575	879	493	581	823	460	858	837	282
295	528	605	517	458	290	403	611	272	109	505	622
496	627	359	197	813	860	112	338	351	856	859	320
424	753	306	248	355	744	787	519	153	338	323	902

Stop the timer when the grid is finished, not when you write the total.

Numbers ending in 2

Write it once the grid is done

3 Copy and total

Main task: copy each row of digits. Second task: keep a running total.

Rules

Main: copy each five-digit group into the box beside it, in order.

Second: add the second and third digits of every row to a running total as you go.

Write the running total in the box at the end of each row - from memory, not by going back and adding up at the end.

	Copy here	Running total
6 1 1 2 1		
7 9 3 9 7		
7 2 7 6 6		
5 3 9 9 3		
6 6 9 4 6		
9 5 6 8 2		
8 1 7 3 4		
9 9 6 2 7		
2 7 6 4 2		
4 5 4 6 7		
6 7 7 4 5		
7 5 1 3 6		

4 Bridging - answer in a sentence each

Where this shows up outside the sheet.

Q1. Which of the two demands broke down first for you, and what does that order suggest about how you read?

Q2. Across a long lecture, does your note-taking or your understanding fade first, and roughly when?

Q3. With a coursework deadline near, how do you tell genuine progress from the feeling of having been busy?

Answer key

Task 1 · tally
continent or continents

7

Task 2 · crossed out
multiples of 13

10

Task 2 · counted
ending in 2

8

Task 3 · final total
second and third digits

126

Task 1 - suggested answers

Q1. Matching Atlantic coastlines, rock and mountain sequences continuing across oceans, shared fossil plants, and glacial marks in now tropical India.

Q2. A claim of motion needs a cause; without a possible driver, the pattern stays an unexplained coincidence rather than an explanation.

Q3. It supplied a physically workable cause, with the continents carried on moving plates rather than ploughing through the ocean floor.

Q4. That a scientific theory owes a mechanism that could actually work, so matching evidence alone does not earn acceptance.

Notes for the parent or teacher

- Mark the two tasks separately. A student who scores well on the main task and loses the count has not failed - that is the normal pattern, and it is the thing worth discussing.
- Do not prompt or remind during a task. The reminder is the skill.
- An untimed run is a valid run. Record the time only if the student wants to beat it next week.
- Repeat the sheet after a week rather than straight away. Spacing is what makes the gain stick.
- This is attention practice, not an assessment. It does not diagnose anything, and no sheet of this kind should be read as a measure of ability.