

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 cement, make one tally mark in the box at the foot of the page. Do not go back and re-read. One pass only.

Concrete is the second most used substance on Earth after water, and the part of it that causes trouble is the cement. Cement is made by burning limestone and clay at about fourteen hundred degrees in a rotating kiln. Most people assume the emissions come from the fuel, but roughly two thirds of them come out of the rock itself: heating limestone drives carbon dioxide straight out of its chemical structure, a reaction that no cleaner furnace can avoid. India, now the second largest producer in the world, turns out several hundred million tonnes of cement a year.

Engineers have two broad answers. The first is to use less cement in each cubic metre of concrete by replacing part of the cement with fly ash from power stations or slag from steel mills, materials that harden slowly but produce concrete which resists seawater well. Indian plants already blend heavily, and some of the lowest cement contents in the world are mixed in Gujarat. The second answer is to capture the carbon dioxide as it leaves the kiln, which works in a pilot plant but needs cheap power and somewhere to store the gas, neither of which is easy to arrange beside a limestone quarry.

The cement blending route is cheaper, available now, and quietly limited. Fly ash and slag are by-products of coal power and blast furnaces, the very industries that any serious climate programme intends to shut down, so the supply of the best substitute shrinks exactly as demand for it grows. A country building housing for a hundred million new city dwellers cannot simply pour less concrete, and a cement industry whose plan depends on the survival of coal is living on borrowed time rather than working to a strategy.

Tally here - one mark per cement

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. Where do most of the carbon emissions from making cement actually come from?

Q2. Why does blending in fly ash or slag reduce emissions without weakening the concrete?

Q3. Why could the blending strategy become harder in the decades ahead?

Q4. What does the writer mean by calling the cheaper solution borrowed time?

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 8.

Second: count - silently, no marks - how many numbers end in 4. Write the total in the box only when you have finished the whole grid.

39	38	84	90	28	77	63	16	76	70	44	74	65	96	25	41
69	69	10	98	88	84	28	46	16	12	25	75	83	58	21	74
32	93	35	95	92	99	44	49	54	62	31	13	98	55	93	79
14	60	15	59	52	72	84	77	85	53	47	52	67	28	38	98
49	88	83	42	65	34	26	60	33	94	61	38	89	63	33	10
41	42	27	68	52	98	72	25	50	47	33	49	91	54	58	68
71	60	68	60	82	27	48	30	33	30	53	55	22	88	89	83
49	65	87	28	58	99	96	70	32	72	56	79	80	76	69	14

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

Numbers ending in 4

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 four-digit group into the box beside it, in order.

Second: add the second digit 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
7 6 1 9		
9 9 2 6		
5 1 9 5		
1 5 9 5		
8 9 4 2		
8 1 1 2		
5 3 2 8		
7 2 1 8		
8 6 2 3		
5 5 9 3		
5 9 1 6		
1 8 8 7		

4 Bridging - answer in a sentence each

Where this shows up outside the sheet.

Q1. Which of your two tasks here faded first, and can you say honestly why that one went?

Q2. Name a moment in the past fortnight when a second demand cost you marks or accuracy.

Q3. What would you set up differently before a revision session that needs reading and note-taking together?

Answer key

Task 1 · tally
cement

8

Task 2 · crossed out
multiples of 8

15

Task 2 · counted
ending in 4

13

Task 3 · final total
second digits

64

Task 1 - suggested answers

Q1. About two thirds come from the limestone itself, which releases carbon dioxide when heated, not from the fuel.

Q2. It replaces part of the cement with a material that still hardens, so less rock has to be burned per cubic metre.

Q3. Both substitutes are by-products of coal power and steelmaking, industries that climate policy aims to wind down.

Q4. That it relies on the continued existence of the industries being phased out, so it cannot last as a long-term answer.

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.