YEAR 10 · LITERACY & NUMERACY CAA PREP

Introduction to Website Design

HTML/CSS, layout, navigation and user experience

These six short tasks build the exact skills assessed in the NCEA Literacy and Numeracy Common Assessment Activities (CAAs) — vocabulary, sentence accuracy, rates, percentages, measurement and checking whether an answer is reasonable. Each task takes about 5 minutes and can be used as a lesson starter or worked through independently.

Literacy Starters

1. Vocab Grab + Kernel Sentence

Literacy CAA — Writing: vocabulary & sentence construction

2 min brainstorm + 3 min sentence build

Word bank (add your own too):

hyperlink · navigation · responsive · layout · tag · attribute · domain · browser · template · wireframe · homepage · menu

Now write your own kernel sentence and expand it 3 times:

2. Sentence Combining

Literacy CAA — Writing: sentence structure & fluency

5 min

- The homepage was cluttered.
- Visitors got confused.
- The bounce rate increased.

Your combined sentence:

3. Cut 10 Words

Literacy CAA — Writing: concision & editing

5 min

When you are designing a website for a client, it is a really good idea that you should always try to make sure that the navigation menu is something that is very easy for the user to be able to find and use without too much difficulty.

Your rewrite:

Numeracy Starters

1. Read the Graph – Bounce Rate

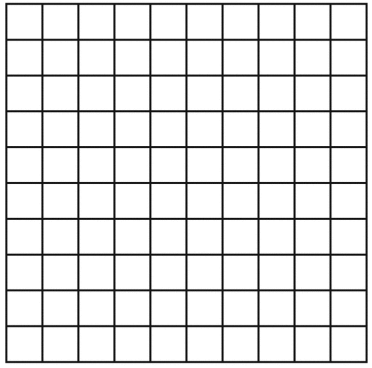
Numeracy CAA — Statistics: reading & interpreting graphs

5 min

A study shows:
at 1 second load time, 10% of visitors leave;
at 3 seconds, 32% leave;
at 5 seconds, 50% leave.

Estimate what percentage of visitors would leave at a 4-second load time.

Show your working, the grid may be useful:



2. How Long to Load?

Numeracy CAA — Measurement: unit conversion & rates

5 min

A web page is 3 MB in size. The visitor's connection speed is 12 Mbps (megabits per second). Remember: 1 byte = 8 bits, so 3 MB = 24 megabits.

How many seconds will the page take to load?

Show your working:

3. Spot the Error – Grid Layout

Numeracy CAA — Reasonableness: checking a calculation

5 min

A wireframe uses a 12-column grid. The total width is 1200 pixels.

Student says: A student calculates each column's width as 1200 × 12 = 14,400 pixels.

What did the student do wrong, and how wide should each column actually be?

Show your working:

Answer Key & Teaching Notes

Remove this page before handing out as a blind self-test.

Literacy

1. Vocab Grab + Kernel Sentence
Model answer: The cluttered homepage loaded slowly on mobile, frustrating visitors before they could find the menu.
Teaching note: Model the expansion once, then set a 3-minute timer. Look for students adding an adjective, a location/condition phrase, and a consequence clause.

2. Sentence Combining
Model answer: Because the homepage was cluttered, visitors got confused and the bounce rate increased.
Teaching note: Accept any grammatically correct combination that keeps the cause-and-effect relationship clear.

3. Cut 10 Words
Model answer: When designing a website for a client, make sure the navigation menu is easy for users to find and use.
Teaching note: Word-count both versions on the board as proof — this is the 'cut 10 words' revising activity from the writing PD, applied to a design brief.

Numeracy

1. Read the Graph — Bounce Rate
Working: 4 seconds is halfway between 3s (32%) and 5s (50%)
Answer: ≈ 41% (accept 38–44%)
Teaching note: This is an interpolation question — there's no single 'correct' number, but answers should sit sensibly between the two given points.

2. How Long to Load?
Working: 24 megabits ÷ 12 Mbps
Answer: 2 seconds
Teaching note: The unit conversion (MB → Mb) is the trap here — many real numeracy CAA questions hide a conversion step inside a rate question just like this.

3. Spot the Error — Grid Layout
Working:
Answer: They multiplied instead of dividing. Correct width = 1200 ÷ 12 = 100 pixels per column.
Teaching note: Ask students: 'could a column really be wider than the whole screen?' — reasonableness first, recalculation second.