Significant Figures

Syllabus tracker Open it online

Name: _____

Date: _____

Tick one circle for each statement — on screen (click) or with a pen. Then try the quick checks: write your answer in the box, check it against the answers at the end, and tick “right” when you got it.

Rounding

Decimal places, significant figures and rounding large numbers.

	Don't know	Shaky	Got it
I can round to a given number of decimal places.	○	○	○
I can round a small number to significant figures.	○	○	○
I can round a large number to significant figures.	○	○	○

Estimating

Rounding each number to 1 significant figure to estimate an answer.

	Don't know	Shaky	Got it
I can estimate a calculation by rounding each number to 1 significant figure.	○	○	○
I can say whether an estimate is too big or too small.	○	○	○

A sensible accuracy

Choosing how to round a final answer.

	Don't know	Shaky	Got it
I can give an answer to the accuracy Cambridge expects.	○	○	○

Quick checks

One quick question per statement. Answer in the box, then check the answers at the end.

1. Round 3.14159 to 2 decimal places.

Answer: _____ ☐ I got it right

2. Round 0.004682 to 2 significant figures.

Answer: _____ ☐ I got it right

3. Round 68 451 to 3 significant figures.

Answer: _____ ☐ I got it right

4. Estimate (38.7 × 5.12) ÷ 0.198 by rounding each number to 1 significant figure.

Answer: _____ ☐ I got it right

5. Estimating 6.8 × 3.9 as 7 × 4 gives…
A an overestimate **B** an underestimate **C** the exact answer

Answer: _____ ☐ I got it right

6. A calculator shows 2.718281 m. Cambridge's default is 3 significant figures. Which answer follows it?
A 2.718281 m **B** 2.72 m **C** 3 m **D** 2.7182 m

Answer: _____ ☐ I got it right

Answers

Try every question first, then check.

1. 3.14
2. 0.0047
3. 68500
4. 1000
5. A: an overestimate
6. B: 2.72 m