

## Learner workbook: Geometry probability and statistics consolidation

Objective: Connect geometry, probability and statistics through mixed problems.

Calculator condition: Non-calculator core; calculator optional only for checking where labelled.

**L095 Geometry probability and statistics consolidation**

Collect

Represent

Analyse

Conclude

**Is the sample fair?**

**What does the diagram show?**

What conclusion is valid?

Objective: Connect geometry, probability and statistics through mixed problems.

### Connect & Check

- State the objective and timeline. Retrieve algebra consolidation or a prerequisite. Diagnose a common error before modelling.
- Write one starting question you want answered today.

### Choose your route

|                                                                            |                                                                                    |                                                                                        |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Route A: Visual</b><br>Use a diagram, graph, table or annotation first. | <b>Route B: Method</b><br>Use a worked method, formula or calculation chain first. | <b>Route C: Explain</b><br>Start with words: what is known, what is changing, and why. |
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### Share

- Pairs compare methods or predict a result for geometry probability and statistics consolidation. Ask for a reason, not only an answer.

### Present

- Select representations and units; check whether conclusions follow from evidence

### Apply: supported to independent

**Recall:** Retrieve the key fact or method needed for geometry probability and statistics consolidation.

Working: \_\_\_\_\_

Check/explanation: \_\_\_\_\_

**Core practice:** A fair spinner has sectors 1,2,3,4. Find mean score over one spin and  $P(\text{score} \geq 3)$ .

Working: \_\_\_\_\_

Check/explanation: \_\_\_\_\_

**Reasoning:** A radius doubles. Compare the circle's area and circumference multipliers.

Working: \_\_\_\_\_

Check/explanation: \_\_\_\_\_

**Exam-style:** A probability problem is presented with two stages. Complete the representation, calculate the probability and explain any assumption.

Working: \_\_\_\_\_

Check/explanation: \_\_\_\_\_

### Recall & Review

- Revisit the objective. Learners solve a fresh item without prompts, explain a check, correct one error and record the next practice.

WWW: \_\_\_\_\_ EBI: \_\_\_\_\_

# Recall & Review: feedback and extension integration

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## Lesson L095: Geometry probability and statistics consolidation

Objective: Connect geometry, probability and statistics through mixed problems.

### Timing for a 60-minute lesson

0-7 Connect & Check; 7-14 Share; 14-25 Present/model; 25-44 Apply route choice/practice; 44-52 independent exam-style check; 52-60 Recall & Review, WWW/EBI and next step.

### Recall & Review evidence

At the end of the lesson, solve a fresh question without prompts, explain one check, correct one error and record the next practice step.

### What Went Well (WWW)

I used my working and assessment evidence to identify the exact mathematical step that was secure and the specific misconception that needs attention.

### Even Better If (EBI)

I will correct one precise step, explain why the correction works and complete a fresh delayed question without the original scaffold.

### Integrated stretch and deep challenge

Stretch: A fair spinner has sectors 1,2,3,4. Find mean score over one spin and  $P(\text{score} \geq 3)$ .

Deep challenge: A radius doubles. Compare the circle's area and circumference multipliers.

### My next-step response

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