

Slide by slide delivery map

Pearson Edexcel GCSE Mathematics 1MA1 • L032

22 slides • 60 minutes • Teacher use only • Lesson resources

REACH FOR THE STAR | GCSE MATHEMATICS

01 Geometry checkpoint and feedback 1 min Recall

Use independent geometry evidence to identify misconceptions, complete a targeted repair and demonstrate transfer.

02 The goal and the evidence 1 min Recall

L025–L031 geometry sequence; earlier number and equation methods.

03 Starting-point diagnostic 5 min Recall

Wrong angle: name the rays and parallel markings. Wrong image: mark centre or mirror first. Wrong scale: write both units. Wrong locus: distinguish exactly from within. Reassess one day and one week later.

04 See the geometry 2 min Discover

A correct number with a wrong reason does not establish understanding. Angle errors may concern the total or the relationship; transformation errors may concern the centre or direction; scale errors may concern units. Identify the first decision that failed, repair it and test with a fresh item after a delay.

05 Worked example and your turn 3 min Discover

73°. 180–107.

Delivery continued

06 Worked example and your turn 3 min Discover

$(-2, -1)$. Both four units from $x=2$.

07 Worked example and your turn 3 min Discover

105° . Subtract 180.

08 Worked example and your turn 3 min Discover

13.5 km. Multiply by three.

09 A method you can explain 2 min Discover

Attempt Recall unaided. Select a matching worked repair; explain the change. Complete Apply and Prove independently. Use the practical sheet for a drawing check and keep its evidence separately from numeric retrieval.

10 Diagnostic pause 3 min Apply

A learner finds 60° but writes angles around a point total 180° . Is the reasoning secure? A yes, B no. Answer B: the claimed fact is false despite the number.

Delivery continued

11 Careful variation 4 min Apply

$70^\circ, 120^\circ, 108^\circ$. Triangle sum; regular-polygon angle; parallel co-interior sum.

12 Independent application 4 min Apply

(5,3); (6,4) uses the origin as centre. Displacement (2,1) doubles, then add centre.

13 Use the method in context 4 min Apply

3 km; 245° . 300000 cm=3 km; add 180.

14 Intentional practice feedback 2 min Apply

300000 cm=3 km; add 180. Use a non-calculator first attempt. In the practical repair, a calculator may check unit conversions; assess geometric reasoning and drawing separately.

15 A claim to test 4 min Challenge

A fresh independent task after a delay with explanation and recorded support. Immediate recall may be memory of answers.

Delivery continued

16 Deepen the reasoning 4 min Challenge

No; enlarging one preserves angles but changes lengths. AAA is insufficient for congruence.

17 Retrieval without notes 2 min Prove

Answers: 62, 120, 105. Completion is not mastery.

18 Retrieval without notes 2 min Prove

Answers: 3, -1, 70. Completion is not mastery.

19 Independent exit evidence 2 min Prove

12 sides B1; 150° B1. $360 \div 30$ and $180 - 30$.

20 Independent exit evidence 3 min Prove

Displacement (1,3) doubles to (2,6) M1; (3,7) A1. Add the centre back.

Delivery continued

21 Feedback and next steps 2 min Prove

Wrong angle: name the rays and parallel markings. Wrong image: mark centre or mirror first.

Wrong scale: write both units. Wrong locus: distinguish exactly from within. Reassess one day and one week later.

22 Before the next lesson 1 min Recall

Perimeter measures a boundary in length units; area measures surface coverage in square units. A compound shape can be partitioned into familiar shapes without overlaps or gaps.

Recall & Review: feedback and extension integration

Lesson L032: Geometry checkpoint and feedback

Objective: Use independent geometry evidence to identify misconceptions, complete a targeted repair and demonstrate transfer.

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 regular hexagon has side 6 cm. Find perimeter and each exterior angle.

Deep challenge: A shape is enlarged by factor 3 and its original perimeter is 18 cm. A learner says new area is three times. Correct the reasoning.

Teacher use

Use the What Went Well (WWW) and Even Better If (EBI) prompts to write mathematics-specific feedback linked to the objective. Do not accept generic praise: identify the method, representation, reasoning or checking step that improved, then set a fresh next-step question.

Assessment evidence to inspect: Compare corrected responses with the original diagnostic and a fresh unprompted question. Record the misconception repaired and a delayed check. Use a non-calculator first attempt. In the practical repair, a calculator may check unit conversions; assess geometric reasoning and drawing separately..