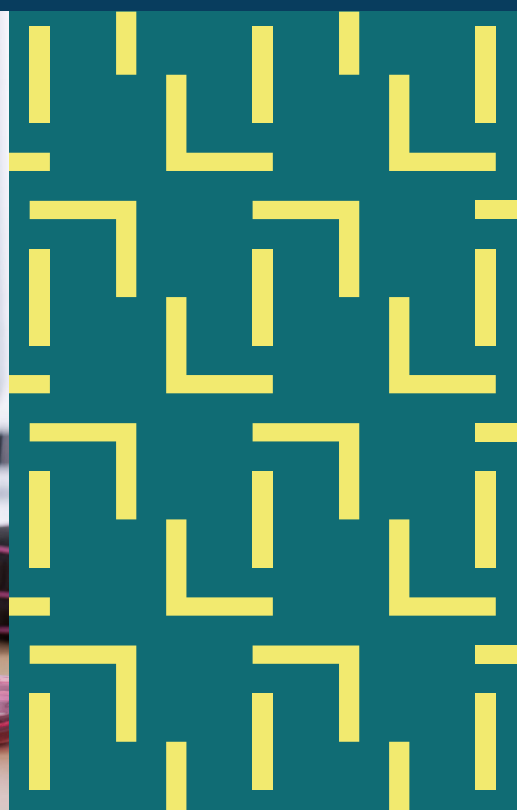


Build progress in mathematics one step at a time

Online targeted interventions for ages 10–16





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What is Shine Interventions: AMT?

Shine Interventions: AMT is an e-learning resource that uses data to provide the learning materials you need for targeted interventions. It accelerates learning progress so you can focus on what matters most: your learners.

Why subscribe to Shine Interventions: AMT?

Shine Interventions: AMT takes a scaffolded, pedagogical approach to bridging learning gaps. Each intervention gradually builds knowledge and progresses through each learning strand only when learners feel confident to do so.

Shine Interventions: AMT houses all your targeted interventions in one place. By using the data you gather with your Access Mathematics Tests (AMT), the platform is able to identify the strands in which individual learners and groups need targeted support, and present you with the necessary resources for your learners' level.

How it works



Prioritise individual learner needs

Informed by the learners' AMT results, the **Individual Intervention Report** in Shine Interventions: AMT provides insights on the individual results of your cohort and flags if a learner needs a targeted intervention in a particular strand.

1. Identify immediately the specific strands that individuals need support in. Each strand contains several learning sequences (topics)
2. Save time on resourcing and only provide support where a learner needs it – if a learner is benchmarking at the expected level in, for example, fractions but is performing below expectations in ratio, you can focus your energy on dealing with this specific strand or learning sequences within that strand



Easily group learners who require the same interventions

The **Grouped Intervention Report** in Shine Interventions: AMT enables you to quickly identify and determine which strands require additional support for your entire cohort or specific groups and act decisively based on that information.

1. Discover the areas in which cohort-wide interventions are needed and adjust your lessons easily
2. Seamlessly create your intervention groups according to the strands they need support in

Track progress over time

At the end of each intervention, administer a learning sequence-specific Progress Quiz to identify progress and any additional support. You can then chart a learner's progress with the built in **Progress Quiz Reports**.

1. Questions are appropriate to the learning level and targeted learning sequence
2. Quick to administer – the quizzes can be completed within one intervention session
3. Test multiple learners or individual learners depending on how many learners require an intervention

Save time with ready-made resources and guidance

Written by mathematical and pedagogical experts, Shine Interventions: AMT provides targeted intervention resources that are suitable for the mathematics age identified by AMT.

1. Interactive teacher presentations – downloadable interactive PowerPoint presentations provide a scaffolded approach to teaching, helping learners to understand the core skills before moving on to the next phase of learning
2. Worksheets and Activities – work through questions with your learners as you provide the targeted interventions. There are also accompanying printable activities for each strand that are pitched at three different levels: easy, medium and hard
3. Teaching notes – every presentation is accompanied by detailed teaching notes that help with the delivery of the lesson, slide by slide. We also outline the pedagogical thinking behind each intervention and enable every member of staff to teach the interventions regardless of mathematical knowledge

Top features

Enhanced reports

Individual Intervention Report: drill down into gaps specific for each learner

Individual intervention report

New Access Mathematics Test [Change product](#)

AMT 1A Autumn

BI Class Year 7 [Change group, class or learner](#)

Individual intervention report

Jared Doyle

AMT 1A Autumn

Last marked: 5 September 2024

Report generated on 24 February 2025

Learner details

Age at test: 11.9

Class: BI Class Year 7

Recent scores

Date taken	5/9/2024	5/9/2024	5/9/2024
Paper taken	AMT 2A Autumn	AMT 2B Autumn	AMT 1A Autumn
Age-standardised score	97	113	99
Standardised score	95	111	92

* Age outside of range

Strand

Score	Questions	Suggested learning sequences
Place value	3/14 Q1, Q8, Q10, Q27, Q28, Q60 Q5, Q16, Q42, Q44, Q51 Q14, Q31, Q37	1 Place value
The four operations	6/11 Q2, Q4, Q12, Q18, Q22, Q29, Q34, Q39, Q45, Q58 Q7	2 The four operations

Grouped Intervention Report: get a cohort-wide view of learning gaps

Grouped intervention report

New Access Mathematics Test [Change product](#)

AMT 1A Autumn

BI Class Year 7 [Change class or group](#)

Grouped intervention report

BI Class Year 7

AMT 1A Autumn

Last taken 18 October 2024

Report generated on 24 February 2025

This report shows learners grouped according to their score in each area of learning. Please see the individual intervention report for details specific to each learner.

Strand	Suggested learning sequence	Learner(s)	Score
Place value	1 Place value	Jared Doyle	3 / 14
		Annis Eileen	6 / 14
		Tyrone Fay	7 / 14
		Dee Ferdy	7 / 14
		Phelim Frank	7 / 14
		Aaron Gator	0 / 14
		Kaila Gaye	4 / 14
		Kasey Knight	8 / 14
		Nannie Leith	8 / 14
		Jackie Marianna	8 / 14

Teacher Presentations

Each learning sequence has an accompanying class-facing PowerPoint presentation that breaks down the subject matter into digestible steps.

Contents

Topic 1: One line of symmetry

Topic 2: More than one line of symmetry

[Suggested timing: 15–20 minutes]

AMT Interventions: 9.1 Lines of symmetry in 2-D shapes © Hodder & Stoughton Limited

One line of symmetry

You can use a mirror to check for a line of symmetry.

Place the mirror where you think the line of symmetry is.

Does your shape look the same in the mirror?

If yes, then the mirror lies on the line of symmetry.

For example, here is the line of symmetry for this shape:

2-D shapes © Hodder & Stoughton Limited 2024

More than one line of symmetry

How many lines of symmetry does a parallelogram have?

Opinion 1

Opinion 2

Abi is correct.

There is no way to fold a parallelogram so that the parts of the shape fit exactly on top of each other.

Opinion 1 Opinion 2 Answer

AMT Interventions: 9.1 Lines of symmetry in 2-D shapes © Hodder & Stoughton Limited 2024

Teaching Notes

Each downloadable teacher PowerPoint presentation features notes for most slides to help with in-class delivery. We also provide separate PDFs with detailed background notes that will enable all members of staff to understand the pedagogical approach of the interventions and what each individual learner or group needs to know.

9 Shape

9.1 Lines of symmetry in 2D shapes

Presentation – Teaching notes

Slide 2:

This intervention covers lines of symmetry in 2D shapes. Students are encouraged to identify where lines of symmetry are on 2D shapes, initially using physical manipulatives, if possible (folding paper and using mirrors), and latterly by visualising the lines of symmetry.

Slide 3:

On this slide, students consider an isosceles trapezium. It is shown how the shape can fold along the line of symmetry. The slide notes suggest that students are provided with opportunities for themselves.

Slide 4:

This slide illustrates how a mirror can be used to find a line of symmetry. The slide notes suggest that teachers may wish to use mirrors, and encourage students to find lines of symmetry on different shapes, to enhance their understanding.

Slide 5:

Next, the idea of zero lines or one line of symmetry is introduced. Students are asked to decide whether the shapes have a line of symmetry. The slide notes suggest that all shapes have a line of symmetry is tackled early on in the intervention, and not explicitly explained. The slide notes suggest that students are provided with opportunities to explain why some shapes have zero lines of symmetry.

Slide 6:

Now, students are shown a variety of road signs and asked to identify lines of symmetry. Two of the signs have rotational symmetry, but not line symmetry. The slide notes suggest that the scope of this intervention, and not explicitly explained. The slide notes suggest that students are provided with opportunities to explain why some shapes have zero lines of symmetry.

Slide 7:

In this slide, students are shown a square, and asked to identify lines of symmetry. Again, the slide notes suggest using a paper to consolidate their understanding of lines of symmetry.

Slide 8:

This opinion slide picks up on the common misconception that a parallelogram has line symmetry. Diagrams of a parallelogram folded along a horizontal line and a vertical line are shown. Again, a suggestion is made in the slide notes to use a net to show that a parallelogram has line symmetry because opposite sides are equal. Attention is drawn to shapes like these, which have rotational symmetry. As mentioned earlier, the language of rotation is avoided in favour of the principle of line symmetry.

Shine Interventions: Access Mathematics Test © Hodder & Stoughton Limited 2024

9 Shape

Slide 9:

In this activity, students are invited to consider different types of quadrilaterals and identify the number of lines of symmetry for each. A more challenging question, showing a variety of trapezia, is also included, drawing students' attention to the fact that some shapes may have a different number of lines of symmetry dependent on their properties. Again, however, the focus is not on the properties of shapes, but instead on finding lines of symmetry.

Slide 10:

On this slide, attention is drawn to the common misconceptions students have when identifying lines of symmetry. A diagonal line joining opposite vertices on a rectangle is shown, and students are challenged to explain why it is not a line of symmetry. Next, a line is drawn across a pentagon, splitting the shape into two unequal sized parts; again, students are asked to explain why this is not a line of symmetry. Finally, a shape with rotational, but not reflective, symmetry is shown, with an incorrectly identified line of symmetry, and a discussion is encouraged on why the shape has no lines of symmetry.

Slide 11:

For students who are confident, there is a final activity, where students identify the relationship between the number of lines of symmetry and the number of sides of a regular polygon. Furthermore, there is a suggestion in the slide notes that students could be challenged to discuss the number of lines of symmetry of a circle.

Shine Interventions: Access Mathematics Test © Hodder & Stoughton Limited 2024

2

Worksheets

Each learning sequence has an accompanying worksheet to structure your intervention sessions and see how learners are grasping their needed skills.

10 Statistics

Name:

10.1 Tables

Questions 1–3 refer to the table below.
The table shows the pets owned by Year 9 students.

Pet	Number of students
Cat	7
Dog	4
Fish	0
Hamster	2
Snake	1

- 1 a How many students own a **cat**?
- b How many students own a **hamster**?
- 2 Which pet is owned by
a 1 student
b 0 students?
- 3 What fraction of students own a **hamster**?
Simplify the fraction.

10 Statistics

Questions 7–10 refer to the table below.
The table shows the departure and arrival times of flights from London.

	Departure	Arrival
Paris	09:18	10:42
Madrid	09:45	11:18
Berlin	09:52	11:45
Lisbon	10:05	12:53

- 7 What time does the flight **depart** for
a Madrid
b Lisbon?
- 8 What time does the flight **arrive** in
a Berlin
b Paris?
- 9 How much **later** does the flight for **Berlin depart** than the flight for **Paris**?
- 10 How much **earlier** does the flight for **Madrid depart** than the flight for **Berlin**?

Activities

To help track progress and determine if learners are developing the right set of skills, each learning sequence has three activities of varying difficulty levels learners can do: easy, medium and hard.

Easy

9 Shape

Easy

9.1 Lines of symmetry in 2D shapes

Activity 1

Which of these shapes have a line of symmetry?
For those that do, where is the line of symmetry?

A

B

C

D

E

F

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Medium

9 Shape

Medium

9.1 Lines of symmetry in 2D shapes

Activity 2

How many lines of symmetry do each of these quadrilaterals have? Draw them on.

1 square

2 rectangle

3 parallelogram

4 rhombus

5 kite

6 arrowhead

Shine Interventions: Access Mathematics Test © Hodder & Stoughton Limited 2024

1

Hard

9 Shape

Hard

9.1 Lines of symmetry in 2D shapes

Activity 3

1 Here are three different trapeziums, how many lines of symmetry does each one have?

a

b

c

2 Here are some regular shapes. Draw on all the lines of symmetry. What do you notice?

Equilateral triangle

Square

Regular pentagon

Regular hexagon

Regular heptagon

Regular octagon

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1



Progress Quizzes

You can track progress by assigning a progress quiz for the relevant strand in Boost Insights.

Test 1, Strand test 7: Algebra
Aaron Gator

←

4

5

6

→

Review and submit

9 of 10 00:00

Write a **formula** that shows x equal to 7 times y .

Basic

7	8	9	+	x	y	x^2	$\sqrt{\quad}$
4	5	6	\times	$\frac{x}{\quad}$	$x \cdot \frac{\quad}{\quad}$	$x^{\frac{\quad}{\quad}}$	x_{\quad}
1	2	3	-	<	>	\pm	\$
0	.	,	+	%	$^{\circ}$:	(\quad)
◀	▶	↶	=	$\lfloor \quad \rfloor$	π	∞	

← Previous

Next →

Progress Quiz Reports

You can also track how learners are performing in the Progress Quizzes (one for each learning sequence) with the Progress Quiz reports. There are two types of reports: Intervention progress quiz report and Intervention progress quiz report: comparison view

[illegible]

Intervention Progress Quiz report

Dashboard > Analyse data > Shine Interventions: Access Mathematics Test - Progress Quizzes > Select a report > Select Learners > Intervention progress quiz report - Comparison view

Intervention progress quiz report [Select report](#)

Shine Interventions: Access Mathematics Test - Progress Quizzes [Change product](#)

Paper **204**

Learner	Test 1, Strand test 1: Place value	Test 1, Strand test 2: The four operations
Jared Doyle	25% <div><div></div></div>	
Annis Eileen		
Barbie Elcia		
Tyrone Fay		
Dee Ferdy		
Phelim Frank		
Aaron Gator	83% <div><div></div></div>	67% <div><div></div></div>
Kaita Gaye		
Ade Harland		
Delano Jared		
Becci Kayleen		
Kasey Knight		
Cathy Lark		
Nannie Leith		
Jackie Marianna		
Tory Marvel		
Zariah Meredith		
Amery Miller		
Wyatt Mo		
Carol Nixon	42% <div><div></div></div>	75% <div><div></div></div>
Austen Pancras		
Bernard Paxton		
Shanae Rosaleen		
Kieron Ryan		
Marshall Sammy		

BI Class Year 7
[Change class, group or year](#)

See how learners are performing across multiple progress quizzes (compare up to six at once)

Intervention Progress Quiz report: comparison view

Get in touch

Get hands on with **Shine Interventions: AMT** by contacting your local Assessment Consultant.



Email: education@hachette.co.uk



Tel: 01235 827720

