

Latest Updates from Numicon Online

- ★ [Explore More Copymasters](#) are now available to download. These combine the Explore More Copymasters from the Number, Pattern and Calculating and the Geometry, Measurement and Statistics programmes into one single PDF for each year group. The Explore More Copymasters have been designed to give children one practice activity to do at home for every unit in the teaching programme.
- ★ [Modelling Number Fact Strategies with Numicon](#) available. A series of videos showing how to use Numicon to support the teaching of key number and calculation strategies also used in the *Number Sense Maths*, *Number Facts Fluency* programme. An accompanying visual guide for easy navigation through the videos is also available [here](#). To learn more about 'Number Sense Maths' visit the website [Number Sense Maths](#).
- ★ [Key Mathematical Ideas](#) for Number, Pattern and Calculating, Geometry, Measurement and Statistics are now available for Numicon 1 to 6. Taken from the Implementation Guides, the Key Ideas for each year can now be found in clear and simple to use PDFs. The Key Mathematical Ideas introduce the main concepts encountered and demonstrate how Numicon can help to develop and extend understanding and mathematical thinking.
- ★ [Numicon Planning documents 1–6](#) have now been updated so that you can click the milestone icons in the long-term plans to go straight to the relevant Milestone Statements. Milestone Assessment Cards have also been added in the planning documents after the milestone statements. You can download the full Milestone Assessment Card packs [here](#).
- ★ [SEND/ALN area](#) available, including resources such as flashcards and number lines, and a guide on the Engagement Model with support and Numicon activity ideas. There is also a video created by *Learn and Thrive*, focusing on counting to 5, made specifically to support learners with Down's syndrome.
- ★ [Explorer Progress Books](#) for ages 5 to 11 years are now available to download. There are three books for Number, Pattern and Calculating and one for Geometry, Measurement and Statistics for every year group. These contain rich activities for children to complete. Each one links to a topic in the Teaching Handbook, providing assessment opportunities and encouraging children to apply their learning to new situations, reason and problem solve. Answers for Explorer Progress Books are available [here](#).

Index of *Numicon Online* Resources

Tabs along the top of the screen go to different parts of your subscription:

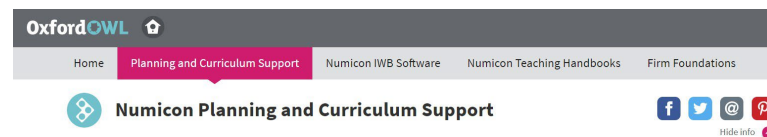
Numicon Home

On the 'Home' tab at the top of the *Numicon Online* page you will find an introduction to Numicon and everything available with your subscription. There are recommendation boxes and access to the full collection of online resources to explore.



NEW Curriculum and Planning Page

Click on the 'Planning and Curriculum' tab at the top of the *Numicon Online* page. It'll take you to a new streamlined page containing all the key documents you need to help you plan using Numicon or any other curriculum or scheme. Watch the short video on the page to show you how to navigate through the new Numicon Planning documents or use the filters on the page to view all the charts by Year Group or Curriculum. Links in each document open activities in the online teaching handbook, so you can go straight to what you need.



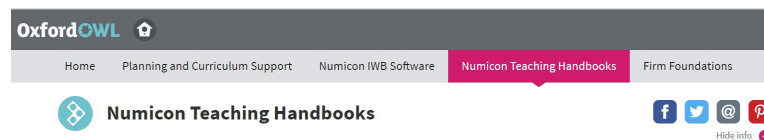
UPDATED Numicon Interactive Whiteboard Software

Click on the 'Numicon IWB Software' tab at the top of the *Numicon Online* page, now updated to include extra resources such as additional bead strings, interlocking cubes and place value counters. There is a short introductory video at the start of the IWB page on how to use the Software, and you can also access the full [User Guide](#). Any saved files are also shown on this page.



[Numicon Teaching Handbooks](#)

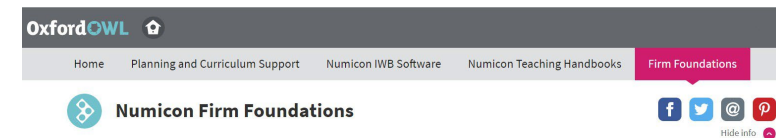
Click on the 'Numicon Teaching Handbooks' tab at the top of the *Numicon Online* page. Here, there is a short introductory video on how to use the teaching handbooks, and direct navigation boxes to the User Guide, the IWB Software and the White Rose curriculum matching charts. You can also search all the available Numicon resources using the filter tools to quickly find exactly what you are looking for.



[Firm Foundations](#)

Click on the 'Firm Foundations' tab at the top of the *Numicon Online* page and you will find all the planning and classroom resources you will need for teaching with *Firm Foundations*. There are also direct navigation boxes to the White Rose curriculum matching charts for Early Years and activity books, and the filter tool so you can search all the resources.

Please note that Numicon *Firm Foundations* requires a separate subscription.



Getting Started

To help you get started with *Numicon Online* and find out about key resources, watch our short introductory webinar (10 mins).

[Register for the webinar here.](#)

Numicon Online Resources

The following resources are available to Oxford Owl and Numicon Online subscribers. Clicking on the links in the table below will take you to information about each category, with a list of all the resources you can find there. Resources are provided for every year group (Firm Foundations and Numicon 1–6) unless otherwise specified. You can also use the 'Resource type' filter to select any of these categories.

<i><u>Planning Resources</u></i>	<i><u>Classroom Resources</u></i>	<u>SEND/ALN</u>
<u>Assessment</u>	<u>Classroom display</u>	
<u>Planning</u>	<u>Photocopy master</u>	
<u>Teacher support videos</u>	<u>Maths story starter</u>	
<u>Professional development</u>	<u>Activity</u>	
<u>Curriculum coverage</u>	<u>Discussion materials</u>	
<u>Answers</u>	<u>Whiteboard resources</u>	
<u>Teaching notes</u>		
<u>Guide</u>		

Numicon Top 10 Resources

Click [here](#) for quick access to the top 10 most popular resources available to Numicon Online subscribers, including the Interactive Glossary, idea videos on how to use both the Interactive Whiteboard and manipulatives in the classroom, the teaching handbooks and more.

Assessment	
Resource	Description
Explorer Progress Books for ages 5–11 years	Each full book is downloadable as a PDF and contains rich and engaging activities for children to complete. Each activity links to a topic in the Teaching Resource Handbook providing opportunities for assessment and monitoring individual progress
Milestone tracking spreadsheets for Numicon 1–6	Tracking spreadsheets for all Teaching Resource Handbooks in Numicon 1–6, Test Practice Questions and Numicon Big Ideas. Enter a rating for each milestone statement to see overall assessment of children's progress
Milestone Assessment Cards for Numicon 1–6 Now including Numicon 1 & 2	Materials for children's self-assessment including printable question cards, category cards, a quick guide, milestone statements, Teaching Progression chart and answer cards Numicon 1 Numicon 2 Numicon 3 Numicon 4 Numicon 5 Numicon 6
Guidance for Year 2 teachers and mental maths practice ideas for Year 2/P3	Suggestions for planning maths teaching in Year 2 to cover the full programme of study in advance of the KS1 SATs, and a checklist of ideas for practising mental maths throughout Numicon 2
Milestones for Numicon 1–6	Editable statements of the skills and understanding needed at each milestone
Individual Pupil Assessment Record – Milestones (Numicon 1–6)	Editable photocopy master showing the milestone statements
Assessment Grids	Editable assessment grids for each Teaching Resource Handbook in Numicon 1–6
Breaking Barriers Assessment Tools	Printable copies of the assessment tools for the Breaking Barriers (SEND) programme: Assessment Signposts, Individual Record of Progress and Child Profile

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Planning							
Resource		Description					
New Key Mathematical Ideas		PDFs containing the Key Mathematical Ideas for <i>Number, Pattern and Calculating</i> (NPC) and <i>Geometry, Measurement and Statistics</i> (GMS) for Numicon 1 to 6, demonstrating how Numicon helps to develop and extend understanding and mathematical thinking					
White Rose Matching Chart for Early Years		Charts showing how Numicon Firm Foundations covers the White Rose Overview for the whole school year, with Small Steps for all Autumn, Spring and Summer Term Blocks					
NEW White Rose Maths Version 3 Matching Charts		Charts showing how Numicon 1–6 supports the White Rose Maths Schemes of Learning: Overviews and small steps for the whole year. Charts 1-6 include direct links to a specific Numicon focus activity or Activity Group. Matching charts for White Rose Schemes of Learning Version 2 for all Autumn, Spring and Summer Term Blocks are also still available					
Numicon planning charts (Numicon 1–6)		Charts showing how to use Numicon as a complete teaching programme with links to everything you need. Long-term plans, assessment and unit summaries help you enrich teaching (with links to the online handbooks)					
Activity Group summaries for each Teaching Resource Handbook		These provide a summary of the information contained on the ‘Educational context’ page of each activity group for <i>Number, Pattern and Calculating</i> (NPC) and <i>Geometry, Measurement and Statistics</i> (GMS) 1–6, including: • Key mathematical ideas • Learning opportunities • Assessment opportunities • Words and terms for use in conversation Cross-references to the Explorer Progress Books (pupil pages) and Explore More resources (for homework)					
Mixed-age planning charts		Guidance documents on how to plan for mixed-age classes using Numicon					
Mixed-age planning charts for Scotland and Northern Ireland		Guidance documents on how to plan for mixed-age classes using Numicon, specific to Scotland and Northern Ireland					
Medium-term planning charts		Editable statements of the understanding children need to progress					
Short-term planning charts		Suggestions for planning and editable templates for creating short-term plans (Word or PDF formats)					
Linking Breaking Barriers and Numicon 1–3		Two charts: 1. Shows the links between Breaking Barriers Activity Groups and Numicon 1, 2 & 3 2. Identifies Activity Groups in the Breaking Barriers Handbook to support work in Numicon 1, 2 & 3. Both charts are grouped by theme to help you plan					
Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teacher support videos

Resource

[IWB idea videos](#)

Videos of activity ideas to use with the Numicon IWB, with supporting notes including curriculum and Numicon milestone matches; resources to use with the whiteboard to keep the whole class engaged; and links to other materials

Numicon Firm Foundations

[Halving and doubling](#)

[Matching Numicon Shapes with numerals, using spinners or numeral cards](#)

Numicon 1

[Halving collections of objects](#)

[Exploring adding facts to 10](#)

[Understanding 'how many more?' with number rods](#)

[Looking at quantity and column value of 2-digit numbers](#)

Numicon 2

[Finding quarters and three-quarters](#)

[Adding to 20](#)

[Rounding double-digit numbers using Numicon Shapes and number rods](#)

Numicon 3

[Fractions on a number line](#)

[Exploring equivalence with number rods](#)

[Adding hundreds, tens and ones](#)

Numicon 4

[Adding and subtracting fractions beyond 1](#)

[Exploring patterns in sequences of multiples](#)

[Using arrays to explore the commutative property of multiplying Multiplying in parts](#)

[Introducing negative numbers on the -12 to 12 Number Line](#)

Numicon 5

[Fractions - illustrating equivalence with Numicon Shapes](#)

[Multiplying proper fractions by whole numbers](#)

[Testing general statements about factors, multiples and divisibility](#)

Numicon 6

[Adding and subtracting fractions with different denominators](#)

[Using arrays to support calculating with fractions](#)

[Investigating rules and generalizing with algebra, to build a sequence and generate the nth term](#)

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teacher support videos (continued)

[NEW NSM videos](#)

Short videos showing how to use Numicon to support the teaching of 'Number Sense Maths Number Facts Fluency' strategies.

The list of videos includes:

- | | |
|---|--|
| <ul style="list-style-type: none"> • NSM video: One More Strategy • NSM video: One More Activities • NSM video: One Less Strategy • NSM video: One Less Activities • NSM video: Two More, Two Less Strategy (part 1) • NSM video: Two More, Two Less Strategy (part 2) • NSM video: Two More, Two Less Strategy (part 3) • NSM video: Number 10 Fact Families Addition Strategy • NSM video: Number 10 Fact Families Addition Activities • NSM video: Number 10 Fact Families Subtraction Strategy • NSM video: Number 10 Fact Families Subtraction Activities • NSM video: Doubles Strategy • NSM video: Doubles Activities • NSM video: Near Doubles Strategy | <ul style="list-style-type: none"> • NSM video: Near Doubles Activities • NSM video: Number Neighbours Strategy • NSM video: Number Neighbours Activities • NSM video: Ten and A Bit Addition Strategy • NSM video: Ten and A Bit Addition Activities • NSM video: Ten and A Bit Subtraction Strategy • NSM video: Ten and A Bit Subtraction Activities • NSM video: Make Ten and Then Addition Strategy • NSM video: Make Ten and Then Subtraction Strategy • NSM video: Adjusting Addition Strategy • NSM video: Adjusting Subtraction Strategy • NSM video: Swap It Strategy • NSM video: Swap It Activities |
|---|--|

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teacher support videos (continued)

[‘How to’ videos](#)

Short videos with Professional Development expert Louise Pennington, demonstrating ways to use manipulatives and the CPA approach:

[How to: Use Spinners for addition](#)

Louise Pennington shows how to use Numicon Spinners to help children with addition (35 secs)

[How to: Use Spinners for multiplication](#)

Louise Pennington shows how to use Numicon Spinners to help children with multiplication (40 secs)

[How to: Use Numicon Shapes at KS2](#)

Ideas for using Numicon manipulatives at Key Stage 2 from Louise Pennington (37 secs)

[Exemplifying the CPA approach](#)

Louise Pennington explains how Numicon manipulatives help to exemplify the concrete-pictorial-abstract approach (1 min 11 secs)

[How to: Algebra using the Pan Balance](#)

Louise Pennington shows how to use the Numicon Pan Balance to help children with algebra (1 min 1 sec)

[How to: Use manipulatives to add fractions](#)

Louise Pennington shows how Numicon manipulatives can be used to add fractions (56 secs)

[How to: Use Numicon Shapes at KS1](#)

Ideas for using Numicon manipulatives at Key Stage 1 from Louise Pennington (58 secs)

[How to: Round numbers using Number Lines](#)

Louise Pennington shows how to use Numicon manipulatives to help children with rounding numbers (1 min 12 secs)

[How to: Number bonds using the Pan Balance](#)

Louise Pennington shows how number bonds can be developed using the Numicon Pan Balance (1 min 17 secs)

[How to: Negative numbers with Number Rods](#)

Louise Pennington shows how to use Number Rods to help children with negative numbers (42 secs)

[How to: Subtraction using the Number Rods and Track](#)

Louise Pennington shows how to use the Number Rods and Track to help children with subtraction (1 min 9 secs)

[How to: Comparison using the Number Rods](#)

Louise Pennington shows how to use Number Rods to help children with comparison (52 secs)

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teacher support videos (continued)

[How to: Adding and subtracting fractions](#)

Louise Pennington shows how Numicon manipulatives can be used to add and subtract fractions from mixed numbers with common denominators (1 min 8)

[How to: Calculations with brackets](#)

Louise Pennington uses Number Rods to model two different ways of solving calculations with brackets (1 min 11 secs)

[How to: Investigating general rules](#)

Louise Pennington uses Number Rods to demonstrate how children can begin to investigate general rules (1 min 37 secs)

[How to: The associative properties of multiplying](#)

Louise Pennington shows how the Numicon shapes can help children with the associative property of multiplication (54 secs)

[How to: Visualising 50% using knowledge of fractions](#)

Louise Pennington shows how the Numicon shapes can be used to visualise and discuss percentages (48 secs)

[What's included in your teaching handbook? \(Numicon 1–6\)](#)

What teaching material supports Numicon 1–6: introducing the printed teaching resources

[What physical apparatus supports the Numicon teaching programme? \(Numicon 1–6\) \(Firm Foundations\)](#)

An introduction to the Numicon apparatus children will be using in class

[How do the Numicon resources support your maths teaching? \(Numicon 1–6\)](#)

Teachers share their experiences of using the Numicon teaching programme

[How to set up your classroom \(Numicon 1–6\) \(Firm Foundations\)](#)

Creating a maths-rich classroom environment, covering both inside and outdoors for Foundation stage

[Numicon in use in the classroom \(Numicon 1–6\)](#)

Using the published resources in the classroom

[Planning and assessing with Numicon \(Numicon 1–6\)](#)

Organizing time and monitoring progress with Numicon

[An activity in action \(Numicon 1–6\)](#)

Watch an activity in action in the classroom, and hear how the activity benefits teaching and learning

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teacher support videos (continued)	
Videos to support teaching the Big Ideas programme	• Introducing the Numicon approach • What's in the Numicon Big Ideas folder? • What physical apparatus supports the Big Ideas programme? • The theory of effective catch-up: what are the barriers to learning? • How to implement effective catch-up: practical guidance • Assessing before and after the intervention

Professional development	
Resource	Description
NEW NSM videos	A video to show how to use Numicon to teach 'Number Sense Maths Facts Fluency' strategy 'Doubles and Near Doubles' with a focus on near doubles.
Teacher interviews	Videos detailing teachers' views on using the Numicon 1–6 and teaching programmes
‘How to’ videos	Short videos with Professional Development expert Louise Pennington, demonstrating ways to use manipulatives and the CPA approach
Videos to support teaching the Big Ideas programme	• Introducing the Numicon approach • What's in the Numicon Big Ideas folder? • What physical apparatus supports the Big Ideas programme? • The theory of effective catch-up: what are the barriers to learning? • How to implement effective catch-up: practical guidance • Assessing before and after the intervention
Bar Modelling Teacher Resources	Introduction to bar modelling, using manipulatives including Numicon Shapes and number rods Resources to support teaching with bar modelling in specific areas of maths, with examples from the Numicon teaching programme: Early Years Adding and Subtracting Multiplying and Dividing Fractions
CPA Teacher Resources	Two resources to support teaching with the Concrete-Pictorial-Abstract approach: • Background to the Concrete-Pictorial-Abstract approach and how Numicon supports it • Guidance on using the Concrete-Pictorial-Abstract approach in your teaching, with examples from the Numicon teaching programme

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Maths story starter	
Resource	Description
Maths story starters 1–10	Printable colour pages for Numicon 1/Foundation stage, with starting points for number stories about the numbers 1–10, using the Numicon Shape patterns

Classroom display	
Resource	Description
Classroom display ideas	A PDF document of suggestions for creating your own classroom displays, written by Numicon authors, plus PDF photocopy masters to support you with this. These resources are designed for use with Numicon 1–4

Curriculum coverage												
Resource			Description									
How Numicon matches to DfE guidance for maths (England)			How you can use the Numicon 1–6 teaching programme with the DfE ready-to-progress criteria and future applications									
How Numicon Firm Foundations meets the Early Learning Goals			How the Numicon Firm Foundations teaching programme covers the Early Years Foundation Stage (EYFS) 2020 and meets the Early Learning Goals (ELGs) for mathematics									
Numicon and the Curriculum for Excellence (Scotland)			How Numicon matches the Curriculum for Excellence: Experiences and Outcomes and Benchmarks, from Early to Third level									
International matching charts (Cambridge International Primary) (PYP)			How Numicon supports the Cambridge International Primary curriculum How Numicon supports the Primary Years Programme (PYP) of the IB									
Numicon and the national curriculum (England, 2014)			How Numicon matches the Early Years Foundation Stage How Numicon matches the national curriculum (PDF and Word) Charts correlating the focus activities and assessment milestones from the Numicon teaching programme with the national curriculum									
Numicon and the LNF (Wales) and Curriculum for Wales + NEW Progression Steps - Spring 2021			How Numicon matches the 2020 Progression Steps, Literacy and Numeracy Framework and Foundation Phase Mathematical Development Area of Learning									
Assessment		Planning	Teacher support videos		Professional development		Curriculum coverage		Answers	Teaching notes	Guide	
Classroom display		Photocopy master		Maths story starter		Activity		SEND/ALN		Discussion materials		Whiteboard resource

Curriculum coverage (continued)

Numicon and the Northern Ireland Curriculum	How Numicon matches the Northern Ireland Curriculum (PDF and Word)
White Rose Maths Version 3 Matching Charts	Charts showing how Firm Foundations and Numicon 1–6 supports the White Rose Maths Schemes of Learning: Overviews and small steps for the whole year. Charts 1-6 include direct links to a specific Numicon focus activity or Activity Group. Matching charts for White Rose Schemes of Learning Version 2 for all Autumn, Spring and Summer Term Blocks are also still available.
NEW Numicon and the Irish Curriculum	How Numicon matches the Irish Curriculum. Includes direct links to the Teaching Handbooks
Power Maths Matching Charts (Now including levels 1–6)	Charts showing how Numicon supports Power Maths 1–6
Maths – No Problem! Matching Charts	Charts showing how Numicon supports Maths No Problem 1–6 Book A and Book B

Discussion materials

Resource	Description
Pupil Book opening questions	These are the opening questions and images taken from the <i>Numicon Pupil Books</i> . You can display these on screen or on an interactive whiteboard and use them for class discussion. The first question (or opening questions) has been provided for each chapter (or Activity Group) of <i>Numicon Pupil Books</i> 3, 4, 5 and 6

Answers

Resource	Description
Pupil Book answers	Full answers to the questions in <i>Numicon Pupil Books</i> 3, 4, 5 and 6, for reference. At the start of each answer book, you will also find an introduction to <i>Numicon Pupil Books</i> from Dr Tony Wing, a guide to key Numicon resources and how these fit together and a planning chart. The planning chart gives you the topic covered by each Activity Group, the corresponding pages in the Pupil Book and the milestone assessment statements
Explorer Progress Book answers	Full answers to questions in the Explorer Progress Books.

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Teaching notes	
Resource	Description
Teaching notes for the IWB idea videos	Activity ideas to use with the Numicon IWB, with supporting notes including curriculum and Numicon milestone matches, resources to use with the whiteboard to keep the whole class engaged; and links to other materials

Guide	
Resource	Description
Numicon Interactive Glossary	Look up definitions and images for key maths terms. Display the glossary on screen for your class or use to prepare your lessons
NEW 'Using Numicon for Number Sense Maths' visual guide	A visual guide to 'Using Numicon for Number Sense Maths Facts Fluency' videos.

Photocopy master	
Resource	Description
Photocopy master packs	A selection of general photocopy masters for regular use. Available in packs for ages 3–5, 5–7 and 7–11
Teaching Resource Handbook photocopy master packs Numicon 1–6 Firm Foundations	Quickly download a PDF pack of all the photocopy master pages from any Teaching Resource Handbook (Firm Foundations to Numicon 6) with links to all the individual photocopy masters
Online photocopy pages	Online-only printable resources, including a quick guide to the number rods. For Firm Foundations, this includes classroom labels, the Counting and Number Ideas book, recipe cards and more

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Photocopy master (continued)

[Activity sheets \(print at A3\)](#)

Ages 3+

- [NEW Numicon ordering](#)
- [Cut-and-stick Christmas tree](#)

Ages 4–7

- [NEW Numicon house](#)
- [Snow tracks 1](#)
- [Christmas tree 1](#)
- [Christmas presents](#)
- [Farm in winter 1](#)
- [Snow people](#)
- [Wrapping paper](#)
- [Garden birds 1](#)
- [Spring flowers 1](#)
- [Flower beds 1](#)
- [Spring chicks 1](#)
- [Spring animals 1](#)
- [Beanbag maths 1](#)
- [Building brick patterns 1](#)
- [Camping conundrum 1](#)
- [Summer fair 1](#)
- [Autumn leaves/maths outdoors 1](#)
- [Firework patterns 1](#)
- [Food collection 1](#)

Ages 7–9

- [NEW Fraction windows](#)
- [Snow tracks 2](#)
- [Christmas tree 2](#)
- [Farm in winter 2](#)
- [Winter pictures \(ice skate\)](#)
- [Garden birds 2](#)
- [Spring flowers 2](#)
- [Flower beds 2](#)
- [Spring chicks 2](#)
- [Spring animals 2](#)
- [Beanbag maths 2](#)
- [Building brick patterns 2](#)
- [Camping conundrum 2](#)
- [Summer fair 2](#)
- [Autumn leaves/maths outdoors 2](#)
- [Firework patterns 2](#)
- [Food collection 2](#)

Ages 9–11

- [NEW Ancient Egyptians](#)
- [Snow tracks 3](#)
- [Christmas tree 3](#)
- [Farm in winter 3](#)
- [Garden birds 3](#)
- [Spring flowers 3](#)
- [Flower beds 3](#)
- [Spring chicks 3](#)
- [Spring animals 3](#)
- [Beanbag maths 3](#)
- [Building brick patterns 3](#)
- [Camping conundrum 3](#)
- [Summer fair 3](#)
- [Firework patterns 3](#)
- [Food collection 3](#)

[Breaking Barriers photocopy pages](#)

The photocopy masters for Breaking Barriers (programme for children with learning difficulties or SEND).
You can download the photocopy pages as a pack or as individual pages, so you can find them by name or number.

You can also find the [Breaking Barriers Assessment Tools](#) in the Assessment section

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Photocopy master (continued)

[Gattegno Chart \(millions and decimals\)](#) A printable Gattegno chart including decimals that can be used to support a range of topics

[Printable Numicon Shapes and Baseboard](#) Printable Numicon Shapes and Baseboard to download and cut out which can be used for a wide variety of activities

Activity

Resource	Description
Explore More Copymasters	Each book is downloadable as a PDF and contains rich and engaging activities for children to complete at home. Each activity links to a topic in the Teaching Resource Handbook.
Mental maths practice ideas for use throughout Year 2/P3	Checklist of ideas for practising mental maths throughout Numicon 2
Extra activities for Scotland, Wales and Northern Ireland in Numicon 6	Two activity groups on additional topics to support Numicon 6: GMS 6 Measurement 1: with added activities on the median, mode and range, including photocopy masters GMS 6 Measurement 5: Probability – full activity group with photocopy masters, Explore More and Explorer Progress Book pages

Assessment	Planning	Teacher support videos	Professional development	Curriculum coverage	Answers	Teaching notes	Guide
Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource	

Activity (continued)

[Activity sheets \(print at A3\)](#)

Ages 3+

- [NEW Numicon ordering](#)
- [Cut-and-stick Christmas tree](#)

Ages 4-7

- [NEW Numicon house](#)
- [Snow tracks 1](#)
- [Christmas tree 1](#)
- [Christmas presents](#)
- [Farm in winter 1](#)
- [Snow people](#)
- [Wrapping paper](#)
- [Garden birds 1](#)
- [Spring flowers 1](#)
- [Flower beds 1](#)
- [Spring chicks 1](#)
- [Spring animals 1](#)
- [Beanbag maths 1](#)
- [Building brick patterns 1](#)
- [Camping conundrum 1](#)
- [Summer fair 1](#)
- [Autumn leaves/maths outdoors 1](#)
- [Firework patterns 1](#)
- [Food collection 1](#)

Ages 7-9

- [NEW Fraction windows](#)
- [Snow tracks 2](#)
- [Christmas tree 2](#)
- [Farm in winter 2](#)
- [Winter pictures \(ice skate\)](#)
- [Garden birds 2](#)
- [Spring flowers 2](#)
- [Flower beds 2](#)
- [Spring chicks 2](#)
- [Spring animals 2](#)
- [Beanbag maths 2](#)
- [Building brick patterns 2](#)
- [Camping conundrum 2](#)
- [Summer fair 2](#)
- [Autumn leaves/maths outdoors 2](#)
- [Firework patterns 2](#)
- [Food collection 2](#)

Ages 9-11

- [NEW Ancient Egyptians](#)
- [Snow tracks 3](#)
- [Christmas tree 3](#)
- [Farm in winter 3](#)
- [Garden birds 3](#)
- [Spring flowers 3](#)
- [Flower beds 3](#)
- [Spring chicks 3](#)
- [Spring animals 3](#)
- [Beanbag maths 3](#)
- [Building brick patterns 3](#)
- [Camping conundrum 3](#)
- [Summer fair 3](#)
- [Firework patterns 3](#)
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Classroom display	Photocopy master	Maths story starter	Activity	SEND/ALN	Discussion materials	Whiteboard resource
SEND/ALN						
Resource		Description				
Using the Engagement Model: Support and Ideas from Numicon		A guide on the Engagement Model with support and Numicon activity ideas, written by teachers from our advocate schools: C. Gibson, C. Hulse, D. Ratcliffe and S. Wilde, with an introduction written by Louise Pennington.				
Numicon Flashcards		Flashcards showing numerals and Numicon Shapes, with the option of number words.				
Numicon Number Lines		Number lines showing numerals and Numicon Shapes, with the option of number words. Cut along the lines to reveal flaps that you can use to hide each of the number words.				
Learn and Thrive I Can Count Video		A video created by <i>Learn and Thrive</i>, focusing on counting to 5, made specifically to support learners with Down's syndrome. For more videos from Learn and Thrive please visit https://www.learnandthrive.org.uk/				

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Whiteboard resources	
Resource	Description
Numicon Interactive Glossary	Definitions and images for key maths terms to use with your class, groups, individuals or when preparing lessons
IWB idea videos	Videos of activity ideas to use with the Numicon IWB, with supporting notes including curriculum and Numicon milestone matches; resources to use with the whiteboard to keep the whole class engaged; and links to other materials
Firm Foundations	Halving and doubling Matching Numicon Shapes with numerals, using spinners or numeral cards
Numicon 1	Halving collections of objects Exploring adding facts to 10 Understanding 'how many more?' with number rods Looking at quantity and column value of 2-digit numbers
Numicon 2	Finding quarters and three-quarters Adding to 20 Rounding double-digit numbers using Numicon Shapes and number rods
Numicon 3	Fractions on a number line Exploring equivalence with number rods Adding hundreds, tens and ones
Numicon 4	Adding and subtracting fractions beyond 1 Exploring patterns in sequences of multiples Using arrays to explore the commutative property of multiplying Multiplying in parts Introducing negative numbers on the -12 to 12 Number Line
Numicon 5	Fractions - illustrating equivalence with Numicon Shapes Multiplying proper fractions by whole numbers Testing general statements about factors, multiples and divisibility
Numicon 6	Adding and subtracting fractions with different denominators Using arrays to support calculating with fractions Investigating rules and generalizing with algebra, to build a sequence and generate the n th term

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