



# Maths Long Term Map

Nursery

## Autumn 1 - All about me / Gingerbread Man

Autumn 1 - All About Me

### Shape & Colour

- Talk about and explore 2D (circles, rectangles, squares and triangles) and 3D (spheres, cuboids and cubes) shapes using informal and mathematical language.
- Develop fast recognition of the primary colours.
- Develop fast recognition of the secondary colours.

### Provision and resources

\* Using **2d shapes**, create a self portrait. Name the shapes used. Talk about the number of sides, corners etc.



\* Using 2d shapes, create a picture of your home. Name the shapes and discuss their features and colours.



\* Create a 2d shape (trace an outline) using standard and non standard manipulative. Name the shape and discuss the features and colours. **Tweezers and beads, counters etc.**



\* Play hopping / jumping shape recognition games. (similar to Twister, simplified.) eg) Touch a square with your foot. Touch a yellow triangle with your hand. **Large foam coloured shapes.**



\* Shape sorting - Feed the hungry shapes. Discussing key vocabulary and colours. **Coloured shapes for shape sorting.**

### Vocabulary

circle, rectangle, square, triangle, sphere, cuboid, cube, side, corner, straight, flat, round, red, yellow, blue, purple, green, orange



\* Story time books - The shape of things by D Dodds. The Greedy Triangle by G Silveria. Perfect Square by M Hall. Circles by D Adler.

\* Tap a shape game. coloured 3d shapes to be set out on a mat. Adult names a shape and colour and the children tap the correct shape. Keep refereeing to the features and colours of each shape. Mini 3d shapes, mini hammers.



\* 3d shape hunt in the sand tray. Keep refereeing to the features and colours of each shape. 3d shapes.



\* Put 3d shapes in balloons with water. Freeze and then peel the balloon away. Children to investigate the shapes inside the ice. Encourage talk around features.

\* 2d and 3d shape tea set for the role play / home area. Children to serve tea in the cup with a square, circle, cuboid etc. Serving shapes tea set YPO



\* Threading - Create repeating patterns using 2d and 3d shapes. Wooden lace shape beads YPO.



\* Colour / shape sorting using tweezers. **My first sorting kit YPO.**



\* Add coloured shapes to the gingerbread man for his buttons and eyes. Keep referring to shape features and colours.



## Autumn 2 - People who help us / The Jolly Postman.

### Shape & Space

- Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc.
- Combine shapes to make new ones – an arch, a bigger triangle, etc.

\* Daily Calendar Work - Count down to Christmas on the calendar in terms of the number of days or sleeps. Refer to the days of the week, and the day before or day after, 'yesterday' and 'tomorrow'. **Calendar.** Use vocabulary like 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'.

\* Provide den-making materials. Allow children to play freely with these materials, outdoors and inside. When appropriate, talk about the shapes and how their properties suit the purpose. **Plasbricks YPO.**



\* Combine / link shapes to make repeating patterns. Discuss shape features, patterns and colours. **Shape links.**



\* Combine 3d shapes to create a given model. **3d shapes and challenge cards from**

Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, morning, afternoon, evening, night time, earlier, later, too late, too soon, in a minute.

circle, rectangle, square, triangle, sphere, cuboid, cube, side, corner, straight, flat, round,

- Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc.
- Extend and create ABAB patterns – stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.

Twinkl.



\* Build houses for the Jolly Postman to deliver his mail. Can the children select the appropriate 3d shapes? 3d shapes.



\* Story time - ABABA a Book of Pattern Play by B Cleary. Pattern Bugs by T Harris.

\* I identify and discuss patterns - Theme day - Children to come to school wearing patterned clothing. Discuss the patterns on the clothes throughout the day. Can the children recreate the patterns using Autumnal objects such as leaves, acorns and conkers?

\* Copy a pattern in the sand tray. (Zig zag, swirl / spiral, dots, spots stripes etc.)



\* Complete an ABAB movement pattern, eg) head, knees, head, knees etc.

\* Make your own ABAB music pattern. eg) drum, triangle, drum, triangle etc. Simple

stripy, spotty, blobs,  
zig zag, spiral,  
repeating

instruments.

\* Can the children spot an error in a repeating pattern of Autumnal objects?



- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'

\* Have ordered, blown up, laminated photographs of the trip to the post box stuck on the wall (inside or out.) Children to verbally describe the sequence of events, eg) First, I put my coat on. Then, I set off walking. Next, I posted my letter. Last, I came back to school. Vocabulary to be verbally recorded on talking postcards and displayed in order above each picture. Children can push the button to hear the vocabulary for each picture. Talking postcards or tins

\* Other sequenced events to describe if needed - Jolly Postman story, teeth brushing or lunch time.

- Understand position through words alone - for example, "The bag is under the table," - with no pointing.
- Describe a familiar route.
- Discuss routes and locations, using words like 'in front of' and 'behind'.



\* Recall the route of the trip to the post box verbally, using photographs, and the order of the things seen on the way.

\* Set up an obstacle course, interesting pathways and hiding places for children to play with freely. When appropriate, ask children to describe their route and give directions to each other. Can the children use preposition language such as under, on top of (I crawled under the plank. I walked on top of the plank. I zig zagged through the cones. \_\_\_\_ was in front of me. \_\_\_\_ was behind me) Planks of wood, crates, cones.



first, then, next, last.

under, on top, above, through.)

	<ul style="list-style-type: none"> <li>• Make comparisons between objects relating to size, length, weight and capacity.</li> </ul>	<ul style="list-style-type: none"> <li>* Using the balance scales, weigh the Jolly Post Man's parcels. Can the children compare the parcels using the language, heaviest, lightest? <b>Outdoor balance scales.</b></li> <li>* Compare the length of the Jolly Postman's letters. Can the children compare the letters using the language, longest, shortest. <b>Assortment of envelopes</b></li> <li>* Compare the length of multi link towers using the language, longest, shortest. <b>Multi link.</b></li> <li>* Show given capacities using containers in the water tray or sand tray. <b>Containers.</b></li> </ul>  <ul style="list-style-type: none"> <li>* Order containers from full to empty and from empty to full.</li> </ul> 	<p>heavy, heaviest, light, lightest, long, longest, short, shortest, full, half full, empty.</p>
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### Spring 1 - Antarctica / Winter - Chinese New Year

Spring 1	<p><b><u>Number 0-2 (Ten Town)</u></b>  <b><u>Comparison, counting, composition, change</u></b>  <i>1 Number taught across 2 weeks.</i></p> <ul style="list-style-type: none"> <li>• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li>• Recite numbers past 5.</li> <li>• Say one number for each item in order: 1,2,3,4,5.</li> <li>• Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</li> <li>• Show 'finger numbers' up to 5.</li> <li>• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> </ul>	<ul style="list-style-type: none"> <li>* Songs to be introduced when a new number is taught and repeated throughout the year. <i>Zero pond's song, King One's song, Tommy Two's song.</i> <b>Ten Town subscriptions.</b></li> <li>* Stories to be introduced when a new number is taught. <b>Zero pond's story, King One's story, Tommy Two's story.</b> <b>Ten Town subscriptions.</b></li> <li>* <u>Comparison</u> - Introduce the number and explore lots of different representations of each number - <b>ten frame and counters, part whole model, counting beads, number line, numicon, number digit, number word, Ten Town character, die, coins, clock, multilink cubes, 0-10 drawstring number bags from Ten Town, Ten Town 0-10 number lines.</b></li> <li>* <u>Comparison</u> - Can the children find an object that represents the focus number when Shown numerous objects? Use the stem sentences - This is ___ This has ___ (insertnumber.)</li> </ul>	<p>zero, one, two, zero pond, King One, Tommy Two, count, represent, ten frame, part whole model, numicon, number line, add, subtract, equals, make.</p>
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- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

\* Comparison - Draw or paint the focus number worth of objects.

\* Comparison - Count the focus number worth of objects using 1-1 correspondence. Use the stem sentence, I can see \_\_\_\_ Counting shapes.

\* Comparison - Refer to the display board / point board to find the focus number. Can the children explain why it is the focus number? Prove it by counting out loud.

\* Comparison - Use the Ten Town formation rhymes to support number formation of each focus number. Squared whiteboards and Wipable wallets for repeated practise.

\* Comparison - Can the children show each focus number using their fingers? Can they clap the focus number? Can they stomp etc?

\* Counting - Show numberblocks clips to model counting to each focus number.

\* Counting - Count the focus number of Winter objects. Winter counting shapes.

\* Counting - Count the focus number of mimed actions (throwing snow balls, putting on hat, rolling a snow man.

\* Counting - On a whiteboard, tally the focus number, draw the number in a ten frame, in a part whole model etc. Ten frame stickers and part whole model stickers.

\* Counting - Build a tower using the focus number of blocks. Count the blocks demonstrating that the last number counted is the total.

\* Counting practise -

Tweezers to pick up focus number of objects.

Bead threading

Link numbers and amounts.



\* Composition - How can you make \_\_\_\_ (focus number.) Children to add themselves together to make the focus number of children.

\* Composition - Use a ten frame and two coloured counters to find ways to make the focus number. Say the stem sentence  $\_ + \_ = \_$  **Ten frames and counters.**



\* Composition - Use a part whole model and numicon to make the focus number. Say the stem sentence  $\_ = \_ + \_$  **Part whole models and numicon.**



\* Change - Have counters on a ten frame already. Can the children add more counters to increase the whole to the focus number. Use the 2<sup>nd</sup> side so we have 2 colours. Use the stem sentence  $\_ + \_ = \_$  counters.

\* Change - Have counters in a part whole model already. Can the children add more counters to increase the whole to the focus number. Use the 2<sup>nd</sup> part section so we can clearly see the separate parts. Use the stem sentence  $\_ + \_ = \_$  counters.

\* Change - Have counters in a ten frame already. Can the children remove counters to decrease the whole number? Use the stem sentence  $\_ - \_ = \_$

\* Change - Have counters in the whole section of a part whole model already. Can the children remove counters to decrease the whole number. Use the stem sentence  $\_ - \_ = \_$  equals  $\_$  counters.



# Spring 2 - Growing - Jack and the Beanstalk

Spring 2

## Number 3-5 (Ten Town)

### Comparison, counting, composition, change

1 Number taught across 2 weeks.

- Develop fast recognition of up to 3 objects, without having to count them individually, ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

\* Songs to be introduced when a new number is taught and repeated throughout the year. Thelma Three's song, Freddie Fours's song, Fiona Five's song. Ten Town subscriptions.

\* Stories to be introduced when a new number is taught. Thelma Three's story, Freddie Fours's story, Fiona Five's story. Ten Town subscriptions.

\* Comparison - Introduce the number and explore lots of different representations of each number - ten frame and counters, part whole model, counting beads, number line, numicon, number digit, number word, Ten Town character, die, coins, clock, multilink cubes, 0-10 drawstring number bags from Ten Town, Ten Town 0-10 number lines.

\* Comparison - Can the children find an object that represents the focus number when Shown numerous objects? Use the stem sentences - This is \_\_\_\_ This has \_\_\_\_ (insertnumber.)

\* Comparison - Draw, foam number print or paint the focus number worth of objects. Foam numbers.

\* Comparison - Count the focus number worth of objects using 1-1 correspondence. Use the stem sentence, I can see \_\_\_\_ Counting shapes.

\* Comparison - Refer to the display board / point board to find the focus number. Can the children explain why it is the focus number? Prove it by counting out loud.

\* Comparison - Use the Ten Town formation rhymes to support number formation of each focus number. Squared whiteboards and Wipable wallets for repeated practise.

\* Comparison - Can the children show each focus number using their fingers? Can they clap the focus number? Can they stomp etc?

three, four, five,  
Thelma Three,  
Freddie Four, Fiona  
Five

count, represent,  
ten frame, part  
whole model,  
numicon, number  
line, add, subtract,  
equals, make.

\* Counting - Show numberblocks clips to model counting to each focus number.

\* Counting - Count the focus number of Winter objects. **Winter counting shapes.**

\* Counting - Count the focus number of mimed actions (throwing snow balls, putting on hat, rolling a snow man).

\* Counting - On a whiteboard, tally the focus number, draw the number in a ten frame, in a part whole model etc. **Ten frame stickers and part whole model stickers.**

\* Counting - Build a tower using the focus number of blocks. Count the blocks demonstrating that the last number counted is the total.

\* Counting practise -

Make your own  
numberblocks

Count Jack's beans.

Make each number to help Jack  
climb the beanstalk. **Playdough**

**Multilink**



\* Composition - How can you make \_\_\_\_ (focus number.) Children to add themselves together to make the focus number of children.

\* Composition - Use a ten frame and two coloured counters to find ways to make the focus number. Say the stem sentence  $\_ + \_ = \_$  **Ten frames and counters.**



\* Composition - Use a part whole model and numicon to make the focus number. Say the stem sentence  $\_ \text{ is } \_ + \_$  **Part whole models and numicon.**



\* Change - Have counters on a ten frame already. Can the children add more counters to increase the whole to the focus number. Use the 2<sup>nd</sup> side so we have 2 colours. Use the stem sentence  $\_ \text{ add } \_ \text{ equals } \_ \text{ counters.}$

\* Change - Have counters in a part whole model already. Can the children add more counters to increase the whole to the focus number. Use the 2<sup>nd</sup> part section so we can clearly see the separate parts. Use the stem sentence  $\_ \text{ adds } \_ \text{ equals } \_ \text{ counters.}$

\* Change - Have counters in a ten frame already. Can the children remove counters to decrease the whole number? Use the stem sentence  $\_ - \_ \text{ equals } \_$

\* Change - Have counters in the whole section of a part whole model already. Can the children remove counters to decrease the whole number. Use the stem sentence  $\_ - \_ \text{ equals } \_ \text{ counters.}$

## Summer 1 - The Farm - 3 Little Pigs

### Number 6-8(Ten Town)

#### Comparison, counting, composition, change

*1 Number taught across 2 weeks.*

- Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in

\* Songs to be introduced when a new number is taught and repeated throughout the year. Seal Six's song, Sir Seven's song, Eric Eight's song. **Ten Town subscriptions.**

\* Stories to be introduced when a new number is taught. **Seal Six's story, Sir Seven's story, Eric Eight's story.** **Ten Town subscriptions.**

\* Comparison - Introduce the number and explore lots of different representations of each number - **ten frame and counters, part whole model, counting beads, number line,**

six, seven, eight,  
Seal Six, Sir  
Seven, Eric Eight

count, represent,  
ten frame, part  
whole model,  
numicon, number

Summer 1

total ('cardinal principle').

- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

numicon, number digit, number word, Ten Town character, die, coins, clock, multilink cubes, 0-10 drawstring number bags from Ten Town, Ten Town 0-10 number lines.

\* Comparison - Can the children find an object that represents the focus number when Shown numerous objects? Use the stem sentences - This is \_\_\_ This has \_\_\_ (insertnumber.)

\* Comparison - Draw, foam number print or paint the focus number worth of objects. **Foam numbers.**

\* Comparison - Count the focus number worth of objects using 1-1 correspondence. Use the stem sentence, I can see \_\_\_\_ **Counting shapes.**

\* Comparison - Refer to the display board / point board to find the focus number. Can the children explain why it is the focus number? Prove it by counting out loud.

\* Comparison - Use the Ten Town formation rhymes to support number formation of each focus number. **Squared whiteboards and Wipable wallets for repeated practise.**

\* Comparison - Can the children show each focus number using their fingers? Can they clap the focus number? Can they stomp etc?

\* Counting - Show numberblocks clips to model counting to each focus number.

\* Counting - Count the focus number of Winter objects. **Winter counting shapes.**

\* Counting - Count the focus number of mimed actions (throwing snow balls, putting on hat, rolling a snow man.

\* Counting - On a whiteboard, tally the focus number, draw the number in a ten frame, in a part whole model etc. **Ten frame stickers and part whole model stickers.**

\* Counting - Build a tower using the focus number of blocks. Count the blocks demonstrating that the last number counted is the total.

line, add, subtract, equals, make.

\* Counting practise -

Count and circle story characters.

Build a house for the pigs using \_\_\_\_ bricks.

Small world bricks

Finger paint \_\_\_\_ pigs.

Count the farm animals.

small world farm animals



\* Composition - How can you make \_\_\_\_ (focus number.) Children to add themselves together to make the focus number of children.

\* Composition - Use a ten frame and two coloured counters to find ways to make the focus number. Say the stem sentence \_\_ + \_\_ makes \_\_ Ten frames and counters.



\* Composition - Use a part whole model and numicon to make the focus number. Say the stem sentence \_\_ is \_\_ + \_\_ Part whole models and numicon.



\* Change - Have counters on a ten frame already. Can the children add more counters to increase the whole to the focus number. Use the 2<sup>nd</sup> side so we have 2 colours. Use the stem sentence \_\_ add \_\_ equals \_\_ counters.

\* Change - Have counters in a part whole model already. Can the children add more

counters to increase the whole to the focus number. Use the 2<sup>nd</sup> part section so we can clearly see the separate parts. Use the stem sentence \_\_ adds \_\_ equals \_\_ counters.

\* Change - Have counters in a ten frame already. Can the children remove counters to decrease the whole number? Use the stem sentence \_\_ - \_\_ equals \_\_

\* Change - Have counters in the whole section of a part whole model already. Can the children remove counters to decrease the whole number. Use the stem sentence \_\_ - \_\_ equals \_\_ counters.

## Summer 2 - Dinosaurs OR Under the Sea (Alternate)

### Number 9-10 (Ten Town)

#### Comparison, counting, composition, change

1 Number taught across 2 weeks.

- Develop fast recognition of up to 3 objects, without having to count them individually, ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
  
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.

\* Songs to be introduced when a new number is taught and repeated throughout the year. Nina Nine's song, Tia Ten's song, Ten Town subscriptions.

\* Stories to be introduced when a new number is taught. Nina Nine's story, Tia Ten's story, Ten Town subscriptions.

\* Comparison - Introduce the number and explore lots of different representations of each number - ten frame and counters, part whole model, counting beads, number line, numicon, number digit, number word, Ten Town character, die, coins, clock, multilink cubes, 0-10 drawstring number bags from Ten Town, Ten Town 0-10 number lines.

\* Comparison - Can the children find an object that represents the focus number when Shown numerous objects? Use the stem sentences - This is \_\_\_\_ This has \_\_\_\_ (insertnumber.)

\* Comparison - Draw, foam number print or paint the focus number worth of objects. Foam numbers.

\* Comparison - Count the focus number worth of objects using 1-1 correspondence. Use the stem sentence, I can see \_\_\_\_ Counting shapes.

\* Comparison - Refer to the display board / point board to find the focus number. Can

nine, ten, Nina Nine, Tia Ten.

count, represent, ten frame, part whole model, numicon, number line, add, subtract, equals, make.

the children explain why it is the focus number? Prove it by counting out loud.

\* Comparison - Use the Ten Town formation rhymes to support number formation of each focus number. Squared whiteboards and Wipable wallets for repeated practise.

\* Comparison - Can the children show each focus number using their fingers? Can they clap the focus number? Can they stomp etc?

\* Counting - Show numberblocks clips to model counting to each focus number.

\* Counting - Count the focus number of Winter objects. Winter counting shapes.

\* Counting - Count the focus number of mimed actions (throwing snow balls, putting on hat, rolling a snow man.

\* Counting - On a whiteboard, tally the focus number, draw the number in a ten frame, in a part whole model etc. Ten frame stickers and part whole model stickers.

\* Counting - Build a tower using the focus number of blocks. Count the blocks demonstrating that the last number counted is the total.

\* Counting practise -

Dinosaur counting with pegs. Pegs.



Match the counting dinosaurs to the eggs



How many dinosaur bones can you dig from the soil?



\* Counting practise -

Match the numeral to the number of counting fish.



Tweezer count given numbers of sea objects.

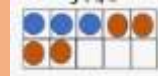


Number fishing in the water tray.



\* Composition - How can you make \_\_\_\_ (focus number.) Children to add themselves together to make the focus number of children.

\* Composition - Use a ten frame and two coloured counters to find ways to make the focus number. Say the stem sentence \_\_ + \_\_ makes \_\_ **Ten frames and counters.**



\* Composition - Use a part whole model and numicon to make the focus number. Say the stem sentence \_\_ is \_\_ + \_\_ **Part whole models and numicon.**



\* Change - Have counters in a ten frame already. Can the children remove counters to decrease the whole number? Use the stem sentence \_\_ - \_\_ equals \_\_

\* Change - Have counters in the whole section of a part whole model already. Can the children remove counters to decrease the whole number. Use the stem sentence \_\_ - \_\_ equals \_\_ counters.



