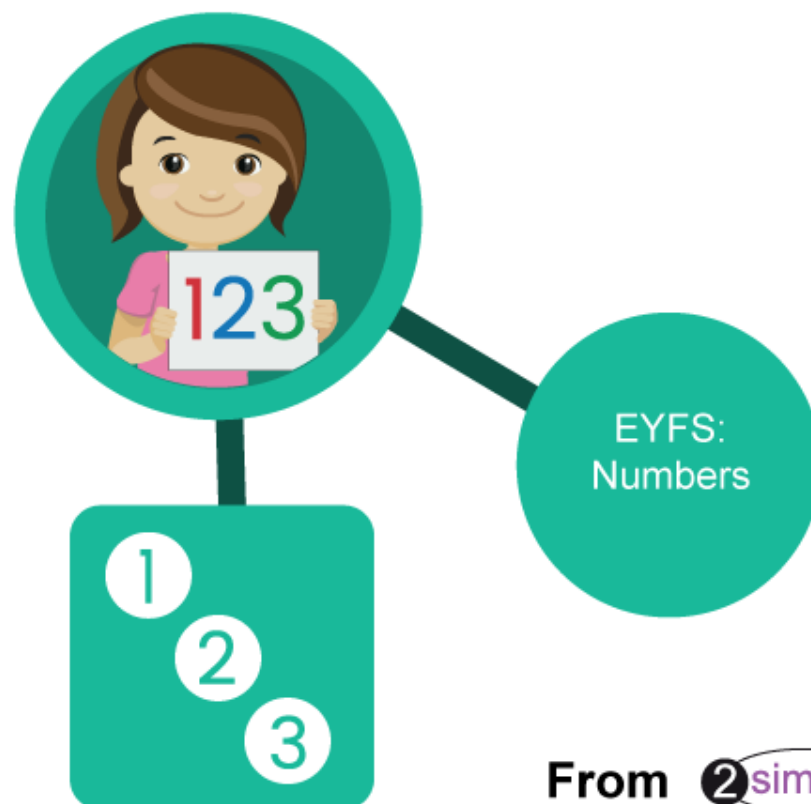




# Computing

## Scheme of Work

### Mathematics 123



From **2simple**

# Mathematics



## Early Learning Goal

Numbers

Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

### Resources:

Maths City 1 (Mini Mash and Purple Mash)

[https://www.purplemash.com/#app/games/mc1\\_minimash](https://www.purplemash.com/#app/games/mc1_minimash)



### Lesson ideas

#### Lesson Ideas:

##### Car race

(Select this activity from the main Maths City 1 page).

Now choose the middle icon on the top row.

##### Level 1

- Move the different cars onto the road to match the outline shape of the car.
- Press the green arrow, the go button in the centre to see what happens.
- Why do some cars go faster than other cars?
- Which numbers goes the slowest, which number goes the fastest?

##### Level 2

- Add the cars to the road wherever you want to place them.
- Which car do you think is going to go the fastest? Why?
- Which will be the slowest car? Why?



### Level 3

- Now add the vehicles you want to use, on the road. Add a number to the vehicle.
- Which number will you chose? Why?
- Which numbers will be the best numbers to use if you want to be one of the winners.
- Which will be the fast vehicles? Which number should you add?

**Now choose the middle icon on the bottom row. (Matching numbers 1-5)**

### Level 1

- Match the correct number on the car to the lane the car should be in, 1-5.
- Press the green, go, arrow key to see who comes first in the race.
- Which car came first?
- Is that the car that you chose?
- Give the medal to the winner.
- Which car number will you choose next time?

### Level 2 (Matching numbers 1-10)

- Match the correct number on the car to the lane the car should be in, 1-10
- Press the green, go, arrow key to see who comes first in the race.
- Which car came first?
- Is that the car that you chose?
- Give the medals to the first, second and third car to win.
- Which car number will you choose next time?

### Level 3 (Matching numbers 1-10)

- Match the correct number on the car to the lane the car should be in, 1-10

- Press the green, go, arrow key to see who comes first in the race.
- Which car came first?
- Is that the car that you chose?
- Give the medals to the first, second and third, fourth and fifth car to win.
- Which car number will you choose next time?



### **Toy Shop**

(Select this activity from the main Maths City 1 page).

**Now choose the middle icon on the top row. (Counting and Matching)**

There are three levels to this activity, choose the level by selecting the number 1,2 or 3 from the top left hand corner of the page.

#### **Level 1**

- Find the correct object to match it to the shape of the object in each section of the mat.
- How many toys can you count in each section?
- How many toys are there altogether.

#### **Level 2**

- Count the number of toys on each section of the mat and match the objects to the number.
- How many can you count in each section?
- How many more objects would you need in each section to make 5 objects altogether?
- How many more objects would you need in each section to make 10 objects altogether?

	<p><b>Level 3</b></p> <ul style="list-style-type: none"> <li>• Make your own sets of toys.</li> <li>• Look at the numbers in each section on the mat, can you make your own set of toys to match the number on the mat?</li> <li>• Which section has the most number of toys? How many are there?</li> <li>• Which section has the least number of toys? How many are there?</li> </ul> <p><b><u>Now choose the third icon on the top row, (Making number pairs).</u></b></p> <p><b>Can you find the matching number pairs? You need to find a number and the correct number of objects to match the number e.g. number two and two ducks.</b></p> <ul style="list-style-type: none"> <li>• Click on two beanbags did you see any numbers?</li> <li>• Did you count any objects?</li> <li>• Try to find the numbers and remember where they are.</li> <li>• Try to find the objects and match them to the numbers.</li> </ul> <p><b><u>Now choose the last icon on the bottom row, (Going shopping.).</u></b></p> <p><b>There are three levels to this activity, choose the level by selecting the number 1,2 or 3 from the top left hand corner of the page.</b></p> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>• Make your own toy shop by adding 2 toys to each of the shelves and dragging a price label for the toy onto the toy. (1p -10p)</li> <li>• How much are you going to charge for the toy?</li> <li>• Are some of the toys going to be more expensive than others?</li> <li>• How much will the cheaper toys be?</li> <li>• How much will the expensive toys be?</li> </ul> <p>When each shelf has two toys, use the purple arrow which appear on the right of the screen to move on.</p>
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	<p>Now select two toys to put in the basket and pay for them at the checkout. Count the number of 1p coins which are needed to pay for the items in the basket. At the checkout, the items are paid for individually.</p> <p><b>Level 2</b></p> <p><b>The same activity as above but the children use 1p, 2p and 5p coins at the checkout. At the checkout, the items are paid for individually.</b></p> <ul style="list-style-type: none"> <li>• Can the children recognise the new coins?</li> <li>• Which coins will they need to make 3p?</li> <li>• Which coins will they need to make 4p</li> </ul> <p>Let the children have plenty of opportunities to use and handle money in their role play shop.</p> <p>Can they recognise the different coins, do the children know how many pennies each of the coins are worth?</p> <p><b>Level 3</b></p> <p><b>The same activity as above using 1p, 2p and 5p coins at the checkout. At the checkout, the items are added together and paid for. The children are introduced to a simple addition sum at the till, showing the two item prices and the cost of them added together.</b></p> <ul style="list-style-type: none"> <li>• Let the children try making their own addition sums using the prices on the toys they have set up in their own role play toy shop area.</li> <li>• Can they write the addition sum using numbers 1-10?</li> <li>• What other things could they sell in their shop? Can they make the same addition sums but using different objects?</li> </ul>
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### The Farm

(Select this activity from the main Maths City 1 page).

Now choose the middle icon on the top row.

#### Level 1

- Match the animals to the correct animal shape?
- How many animals can you see in the field?
- How many animals are there in each part of the field?
- Are the animals all different?
- How many animals are the same?
- Make your own small world farm area. Can the children make sets of different animals?

#### Level 2

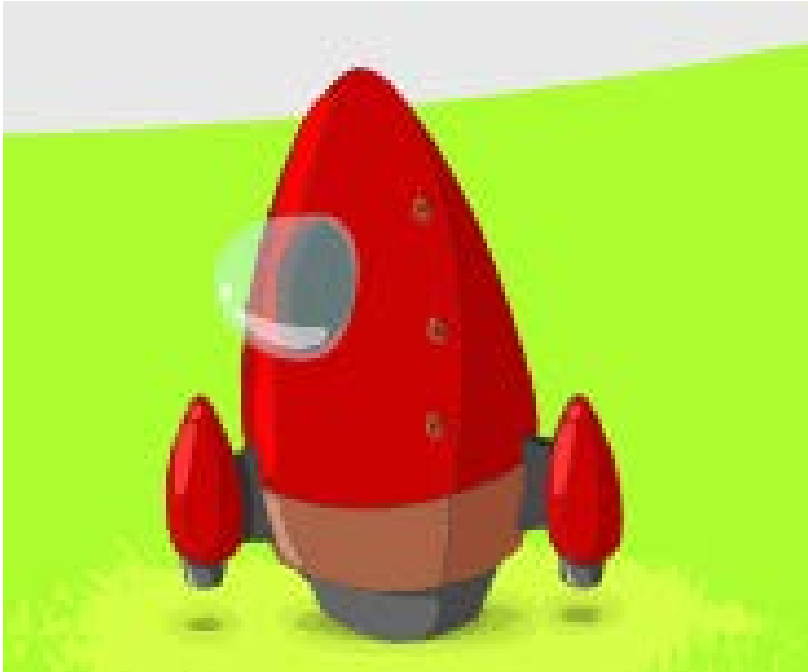
- Match the animals to the correct animal shape?
- How many animals can you see in the field?
- How many animals are there in each part of the field?
- Are the animals all different?
- How many animals are the same?


#### Level 3

- Look at the numbers in the different parts of the field.
- Can the children recognise what the numbers are?
- Can the children put the right numbers of animals to match the number, in that part of the field?
- Will they choose all the same animals?
- How many of each of the animals did they choose?

	<p><b><u>Now choose the third icon on the top row, (Making number pairs).</u></b></p> <p><b>Can you find the matching number pairs? You need to find a number and the correct number of objects to match the number e.g. number two and two ducks.</b></p> <ul style="list-style-type: none"> <li>• Click on two haystacks did you see any numbers?</li> <li>• What numbers did you find?</li> <li>• Did you count any objects?</li> <li>• Which objects did you count?</li> <li>• Try to find the numbers and remember where they are.</li> <li>• Try to find the objects and match them to the numbers.</li> </ul> <p><b><u>Now choose the second icon on the bottom row, (Addition).</u></b></p> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>• What number is the farmer holding?</li> <li>• Can you give the farmer the right number of animals by dragging them to the animal shapes?</li> <li>• When the farmer has the correct number of animals, click on the purple arrow to the right of the screen.</li> <li>• Can you put the animals into two pens?</li> <li>• Watch what happens to the addition sum as you start to put the animals in the pens.</li> <li>• You shouldn't have any animals left on the screen.</li> <li>• Try moving an animal from one pen to the next. What happens to the numbers on the pen?</li> <li>• What happens to the numbers in the sum if you move the animals?</li> <li>• Even if you move the animals around do they always add up to the same number?</li> </ul>
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	<p><b>Level 2</b></p> <ul style="list-style-type: none"> <li>• What number is the farmer holding?</li> <li>• Can you give the farmer the right number of the same animal?</li> <li>• You can choose which animals you give him but they must all be the same.</li> </ul>
	<p><b><u>Space (Rocket)</u></b></p> <p><b>(Select this activity from the main Maths City 1 page).</b></p> <p><b><u>Now choose the middle icon on the top row.</u></b></p> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>• Can you match the rocket to the shape of the rocket on the screen?</li> <li>• Press the green, go arrow key.</li> <li>• Which rocket went the fastest? What was the number on the rocket?</li> <li>• Which rocket was the slowest? What was the number on the rocket?</li> <li>• Try the activity again, which rocket do you think will go the fastest? Why?</li> <li>• Were you right?</li> </ul> <p><b><u>Level 2</u></b></p> <ul style="list-style-type: none"> <li>• Add the rockets to the screen.</li> <li>• Choose which number of rocket you would like to be. Why did you choose that number?</li> <li>• Which rocket do you think will be the winner?</li> </ul>

	<p><b><u>Level 3</u></b></p> <ul style="list-style-type: none"> <li>• Add the rockets to the screen.</li> <li>• Choose the numbers between 1 and 10 to add to the rockets.</li> <li>• What happens when you press go?</li> <li>• Which rocket travelled the fastest?</li> </ul>
	<p><b><u>Outdoor Activities</u></b></p> <p><b>(Select this activity from the main Maths City 1 page).</b></p> <p><b><u>Now choose the middle icon on the top row.</u></b></p> <ul style="list-style-type: none"> <li>• Create sets of objects using numbers 1-10.</li> <li>• Add a number and an object to the playground and work with the children to complete the sets. (In the same way, you carried out the activity in the farm section).</li> <li>• How many bikes will you add?</li> <li>• Can you make a set of 4 flowers in pots?</li> <li>• Can you put 5 guitars out ready for playing?</li> </ul> <p><b><u>Now choose the third icon on the top row.</u></b></p> <p><b>Can you find the matching number pairs? You need to find a number and the correct number of objects to match the number e.g. number two and two snails.</b></p> <ul style="list-style-type: none"> <li>• Click on two flowers did you see any numbers?</li> <li>• What numbers did you find?</li> <li>• Did you count any objects?</li> <li>• Which objects did you count?</li> </ul>

- Try to find the numbers and remember where they are.
- Try to find the objects and match them to the numbers.

**Now choose the middle icon on the bottom row.**

**Can you count the skips?**

**Level 1 – Numbers 1-5**

- Choose a child to skip and add a number between 1 and 5 to the box.
- Can you count the number of skips the child does?
- They need to do the same number of skips that you have put on the box.
- Did they do the same number? How many did they do?
- Do they need to try the skips again?


**Level 2 – Numbers 1-10**

- Choose a child to skip and add a number between 1 and 5 to the box.
- Can you count the number of skips the child does?
- They need to do the same number of skips that you have put on the box.
- Did they do the same number? How many did they do?
- Do they need to try the skips again?

**Now choose the last icon on the bottom row.**

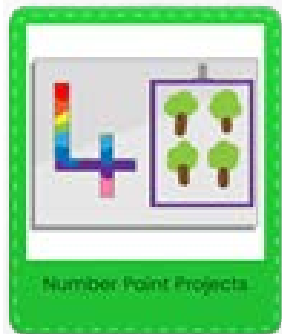
Water the plants and count what starts to grow.

- What do you think is growing in the plant pot?
- How many times should we pour the watering can?

	<ul style="list-style-type: none"> <li>• How many plants do you think will start to grow?</li> <li>• Were you right?</li> <li>• How many things are growing in each of the plant pots?</li> <li>• How many times did you need to pour the watering can to make everything grow?</li> </ul>
<p><b>A -fish-metic (Purple Mash)</b>  <a href="https://www.purplemash.com/#app/games/mg2/afishmetic">https://www.purplemash.com/#app/games/mg2/afishmetic</a></p> 	<p><b>Lesson ideas:</b>          Use the first two levels of this activity to develop number recognition to 10 and to develop basic addition activities.</p> <p><b>Level 1</b>          Counting activity - count the fish on the screen and select the correct number.</p> <ul style="list-style-type: none"> <li>• Can the children count the correct number of fish?</li> <li>• Can the children choose the correct number to show the number of fish?</li> </ul> <p><b>Level 2</b>          Addition and subtraction, numbers up to 20</p> <ul style="list-style-type: none"> <li>• Can the children count the number of fish on the screen?</li> <li>• Can they make the target number by either adding or subtraction a number of fish?</li> <li>• How any fish will they choose?</li> <li>• Did they get it right or do they need to add or subtract more?</li> </ul>

### Number Paint Projects (Mini Mash)

[https://www.purplemash.com/#tab/mm\\_mathematics/mathematics\\_paint\\_projects](https://www.purplemash.com/#tab/mm_mathematics/mathematics_paint_projects)



#### Lesson ideas:

- Practice number formation numbers up to 10
- Can the children recognise numbers up to 10?
- Let the children choose a number, can they find the number in the paint projects?
- Can they paint the number on the blank area at the side?
- Can they draw the number of objects to match the number in the blank area?

### 2Count (Mini Mash and Purple Mash)


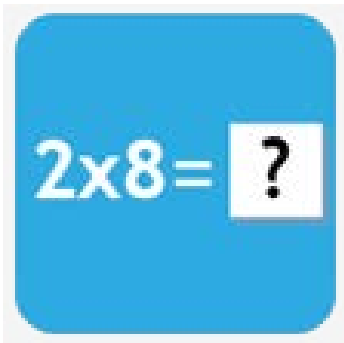
[https://www.purplemash.com/#tab/mm\\_mathematics/mm\\_2count](https://www.purplemash.com/#tab/mm_mathematics/mm_2count)



#### Lesson ideas:

##### Using numbers up to and beyond 20

- Choose a topic to create a pictogram with the children e.g. our favourite snacks.
- Choose the types of snacks the children have in school or add your own pictures.
- How many children would choose each snack as their favourite snack?
- Which snack do most children in the class like the best?
- How many children like that snack the best?
- Which is the second most favourite snack?
- How many more children would need to like this as their favourite snack for it to be the most favourite snack in the class?
- Which is the least favourite snack in the class?
- Where there any children who liked this snack?

	<ul style="list-style-type: none"> <li>• How many children liked this snack?</li> <li>• How many children are in our class altogether?</li> <li>• Have all the children made a choice about their favourite snack?</li> <li>• If they haven't how can we tell by counting the choices on the pictogram?</li> </ul>
<p><b>2Quiz (Purple Mash)</b>  <a href="https://www.purplemash.com/#app/diyjs/2quiz">https://www.purplemash.com/#app/diyjs/2quiz</a></p> <div>   </div>	<p><b>Lesson ideas:</b></p> <ul style="list-style-type: none"> <li>• Use 2Quiz and the section, Maths Quiz to create simple activities for the children to complete.</li> <li>• Choose the numbers you want to use e.g. numbers up to 20 and the type of sum you want the children to do e.g. addition/ subtraction.</li> <li>• Set the quiz as a 2Do for all the class to try.</li> <li>• Let the children make their own quizzes to try with each other.</li> <li>• Set the children's quizzes as 2Do's for all the class to try.</li> <li>• Change the time that you allow the children to do the quiz.</li> <li>• Can the children beat the clock?</li> </ul>