



Family Maths
Toolkit

5

Family
Maths Toolkit

Everyday
Activities Pack



Ages 5-6

Any questions, please email:
enquiries@nationalnumeracy.org.uk





Family Maths Toolkit

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However you might feel about maths, you can make a huge difference to children's numeracy abilities.

This **Everyday Activities Pack**, created by National Numeracy, contains short, fun, 'real life' activities for families to do with children. No special knowledge or equipment is needed.

All the evidence shows that talking about everyday maths helps develop children's maths confidence. Here are some ideas for questions that you can ask each other when tackling the activities:

- What do we need to do?
- What information do we have? What do we need to find out?
- Would any equipment help?
- What do you notice when...?
- Shall we make a guess and see if that works?
- What could we do if we get stuck?
- If we were doing this again, is there anything we could do differently?



The majority of activities are designed to be open ended so you can explore everyday maths together. There are a handful of activities that have answers – these are on the last page of this pack. The pack is aligned by age with England's 2014 National Curriculum. Please note these are just average expectations - children may be working below or above the curriculum links stated.

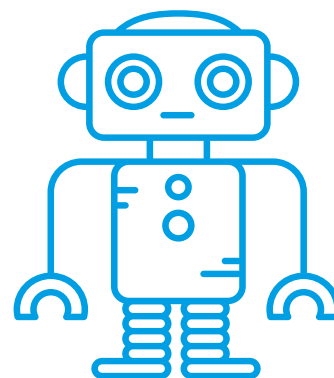
You can adapt these activities to suit your family's interests and use whatever items you may have to hand at home or out and about. You might want to take photos, draw pictures, write calculations or create diagrams – it's up to you! Do use the comment boxes to reflect your discussions and thoughts as you complete each activity together.

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Looking for shapes at home



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You can be detectives looking for shapes that are all around us.

1. Can you find a square in the kitchen?
2. Can you find a rectangle in your bathroom?
3. Can you find a circle in your bedroom?
4. What other shapes can you see around your house?
Can you find a triangle anywhere in your house?
5. Can you draw what you have found?



Family comments:

Child comments:



Curriculum Link

2D shapes including
square, rectangle,
triangle, circle.

Monkey addition fun



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Some monkeys are playing in the park.

**Each monkey has 1 curled tail; 1 wet nose;
2 little ears; 2 bright eyes and 4 legs.**

1. There are 5 monkeys in the park
– how many wet noses?
2. How many little ears? How many legs?
3. There are 5 monkeys playing ball
– how many curled tails?
4. How many legs? How many bright eyes?
5. 2 monkeys go down the slide! How many legs?

Can you make up some more questions (and answers!) about the monkeys in the park? You can change how many monkeys there are if you like.

Helpful hint: Drawing the monkeys can help see the repeated addition.



Family comments:

Child comments:



Curriculum Link

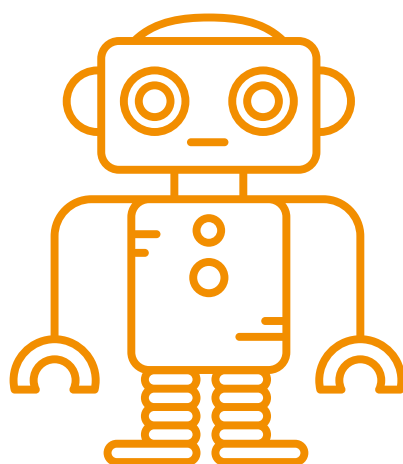
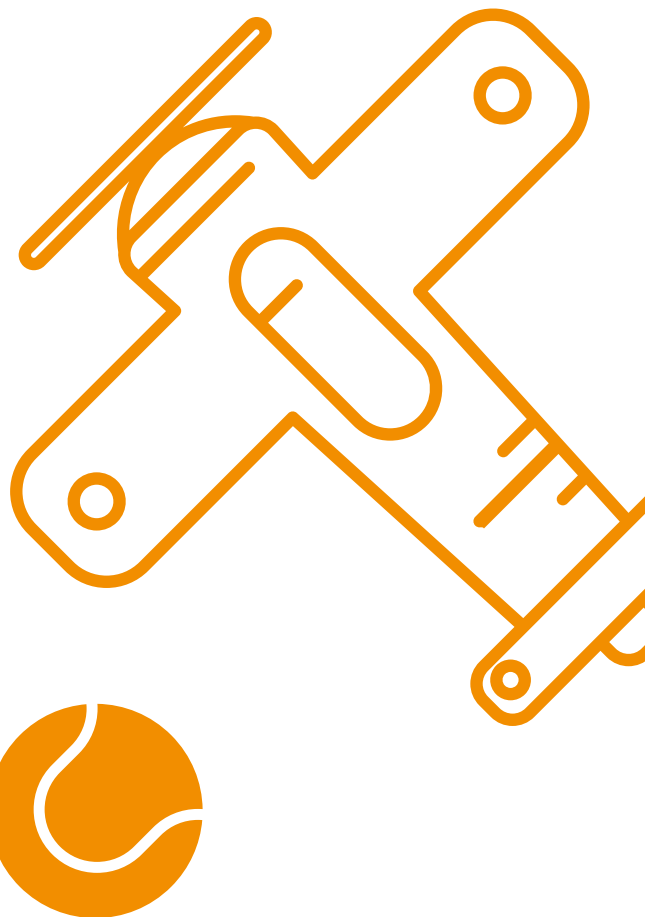
Solve one-step problems that involve addition, using concrete apparatus and pictorial representations.

Choose 5 of your favourite toys.

Put them in order from shortest to tallest.
Are any taller than the length of your hand?

Now put them in order from lightest to heaviest.
Are they in the same order?
Which are in a different place?

Find 5 things in the food cupboard.
Estimate which will be the lightest and heaviest.
Feel them in your hands – were you right?
What is the lightest piece of food you can find?



Family comments:

Child comments:



Curriculum Link

Use and compare
measures using
non-standard units.

Numbers challenge



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Do you have a clock in your house?

Can you read all the numbers?

Where else in the house can you find numbers?

Can you find some in every room in the house? What numbers can you find?

Look carefully, some of them might be hidden.

Write down some of the numbers you find and draw what they are on.



8 9 10 11 12

Family comments:

Child comments:



Curriculum Link

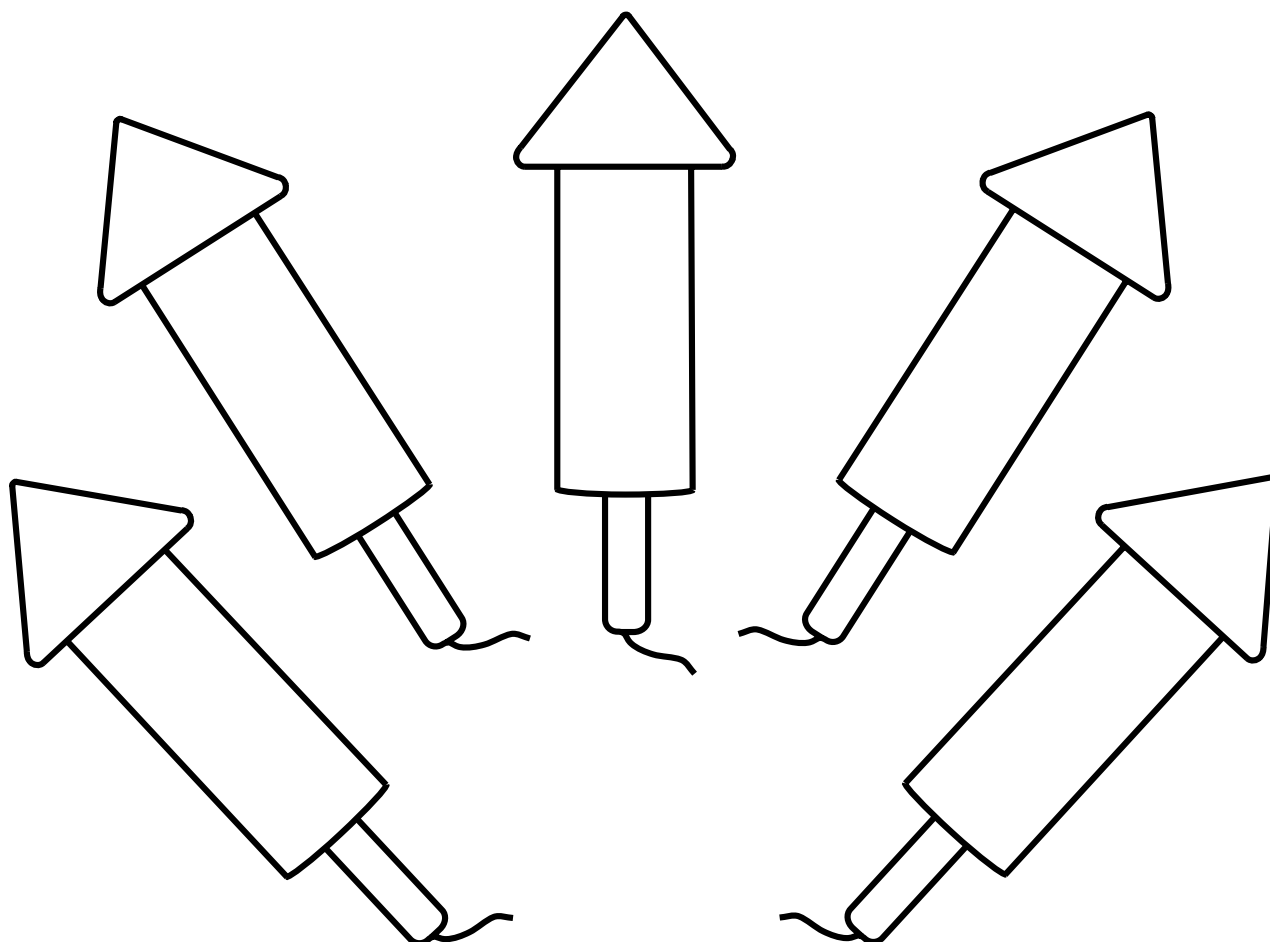
To read and write numbers to 20.

Firework challenge



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Using only 3 colours, how many different ways can you colour the rockets?



Family comments:

Child comments:



Curriculum Link

Problem solving
and working
systematically, finding
all the possibilities.

Decorating a Christmas tree



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Draw a plain Christmas tree.
Ask one of your family to read out the instructions to decorate it – you will have to listen carefully. You will need some colour pencils or crayons.

Draw:

- a red bucket around the trunk (bottom) of the tree
- 3 yellow round decorations on the tree
- a star on the top
- a brown teddy bear next to the tree
- 4 chocolates in the middle of the tree
- a square present in front of the tree
- a red triangle decoration between the star and one of the chocolates
- a blue bauble close to the star
- 2 angels on the right of the tree.

Did you get all the things in the right place?
Now make up some instructions for one of your family to draw on another tree.



Family comments:

Child comments:



Curriculum Link

Positional language,
2D shapes, listening
to instructions
accurately.

Train driver's challenge



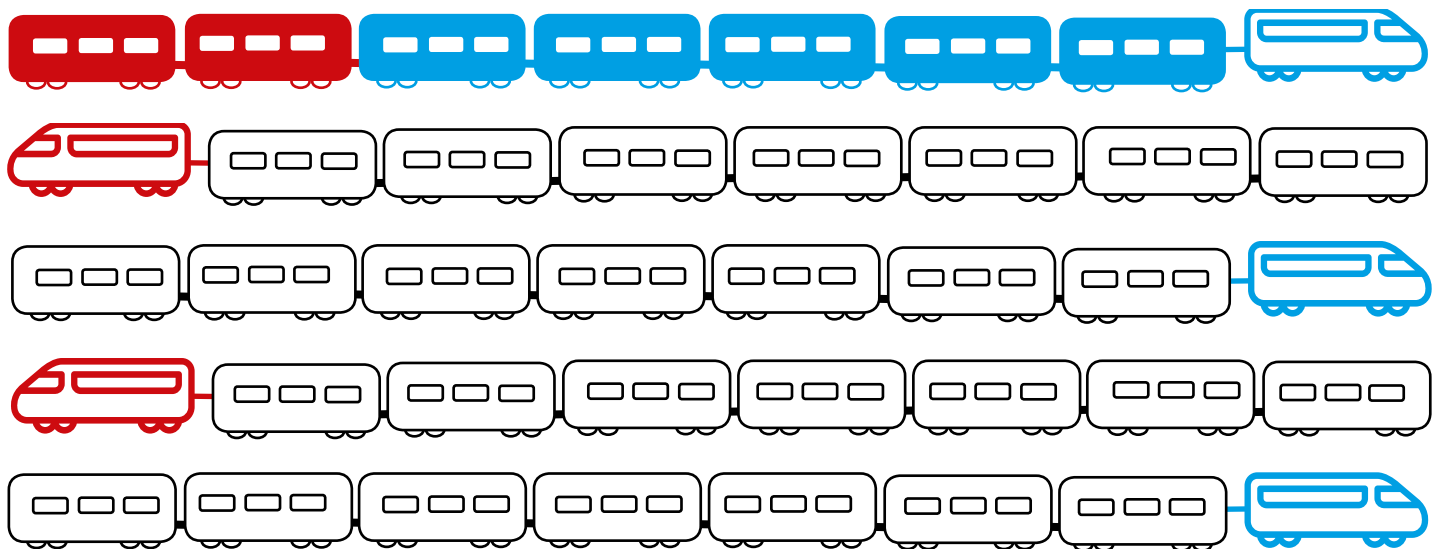
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A train driver has a train
with 5 blue carriages.

One summer day, he has a lot of extra
passengers who want to catch his
train. So he adds 2 red carriages.

How many different ways could he do this?

Here is one way:



Can you draw any more ways?

Family comments:

Child comments:



Curriculum Link

Solve problems
through reasoning
and working
systematically, finding
all the possibilities.

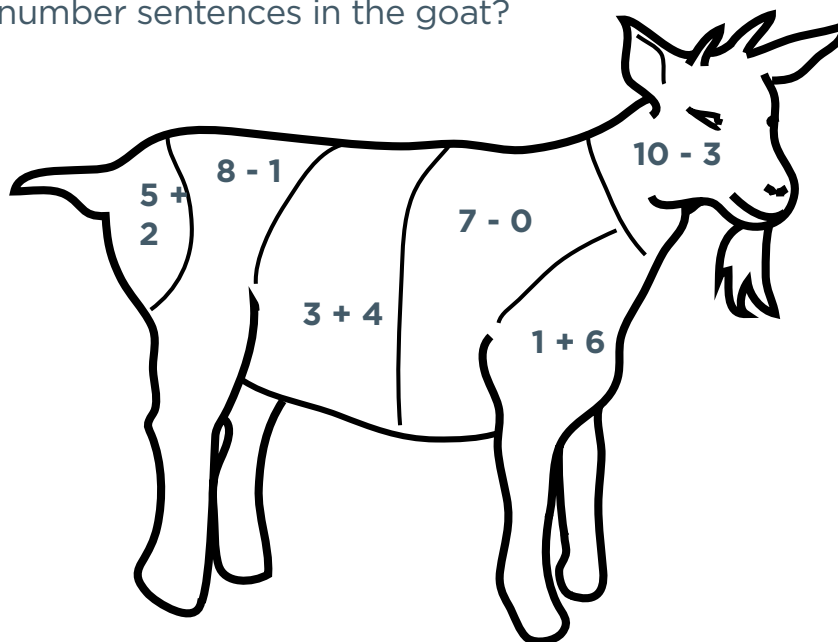
Chinese New Year



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**Each Chinese New Year has its own animal sign.
From February 2015-2016 it is the year of the goat.**

7 is a lucky number for the Chinese goat. Can you complete the number sentences in the goat?



Next year 2016 will be the year of the monkey – can you draw a simple monkey and put some number sentences inside? One of monkey's lucky numbers is 4 – can you make all your number sentences have 4 as an answer?

Family comments:

Child comments:



Curriculum Link

Addition and subtraction number bonds to 10 including zero.

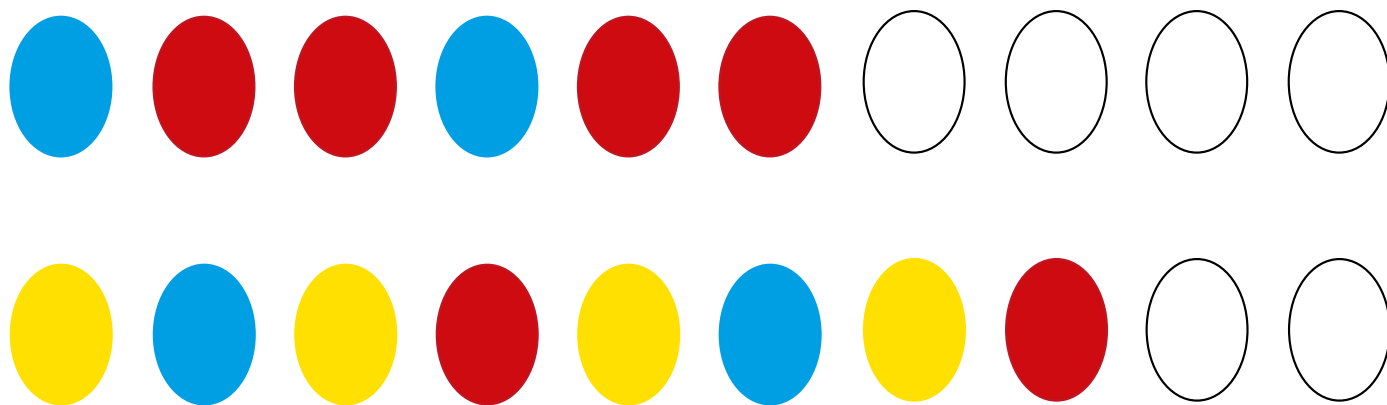
Easter egg patterns



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Sophie has 10 eggs and 3 different pieces of wrapping paper – blue, red and yellow. She wants to put them in boxes in lines which make patterns.

Can you help her finish these patterns?



Then can you make up your own patterns using lines of 10 eggs and 3 colours?

Family comments:

Child comments:



Curriculum Link

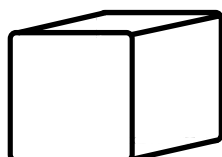
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Create, copy and reorganise patterns.

Finding 3D shapes

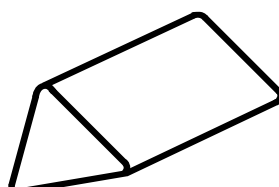


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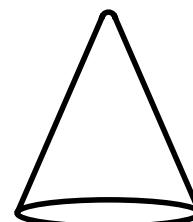
Can you find any objects around the house which are 3D like these -



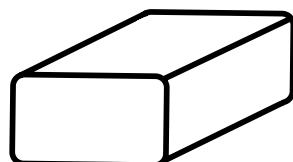
cube



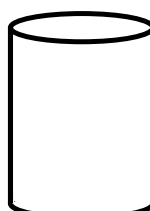
triangular prism



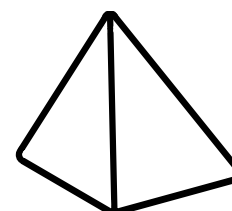
cone



cuboid



cylinder



tetrahedron

1. How many did you find?
2. What are they used for?
Why is it a good shape to use?
3. What is a cone a good shape for?
4. There is a common 3D shape not in the picture
- can you think what it is? Do you have one?

Family comments:

Child comments:



Curriculum Link

Handle common 3D shapes, naming them and relating everyday objects. Recognise these shapes in different orientations and sizes.

Traditional story maths



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1. Add the number of bears that Goldilocks met with the number of dwarves that Snow White met.
2. Double the number of Billy Goats Gruff and then add the number of trolls under the bridge.
3. The Prince looked for Cinderella for 2 weeks. How many days is that?
4. There are 7 dwarves in Snow White. How many shoes would they need altogether?
5. Baby Bear eats 5 boxes of porridge a week. Daddy Bear eats double that amount. How much does Daddy Bear eat?

Do you know any other stories you could make up a maths question about?



Family comments:

Child comments:



Curriculum Link

Solving one step word problems, involving addition, doubling, days in a week, counting in 2s.

Using money challenge



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Gather some items to sell. You could make a toy shop, a supermarket or even a shoe shop. Then you need to make some price tickets.

Make labels of up to 20p. Now you need some money to buy the items. Use 1p, 2p, 5p, 10p and 20p only.

Decide who will be the shopkeeper and who will be the shopper (you can swap round).

Have fun shopping and then make an advert for your shop to show what you have for sale and the prices.

Which is the most expensive thing for sale?

Do you have any special offers?



Family comments:

Child comments:



Curriculum Link

Recognise and know the value of coins.

Paddy the dog's week



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Here is one of Paddy's weeks.



Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Went for a long walk to the woods	Had a special dinner with a fish finger in	Went down to the beach	Had a bath	Chewed a favourite tennis ball	Got a new collar	Played with Monty my friend

Can you show what you do each day of one week? Which was your favourite day? Are there some things you do on the same day every week?

Helpful hint: Talk about the next day; the day before; in two days time; every Tuesday; how many days from Monday to Friday.

Family comments:

Child comments:

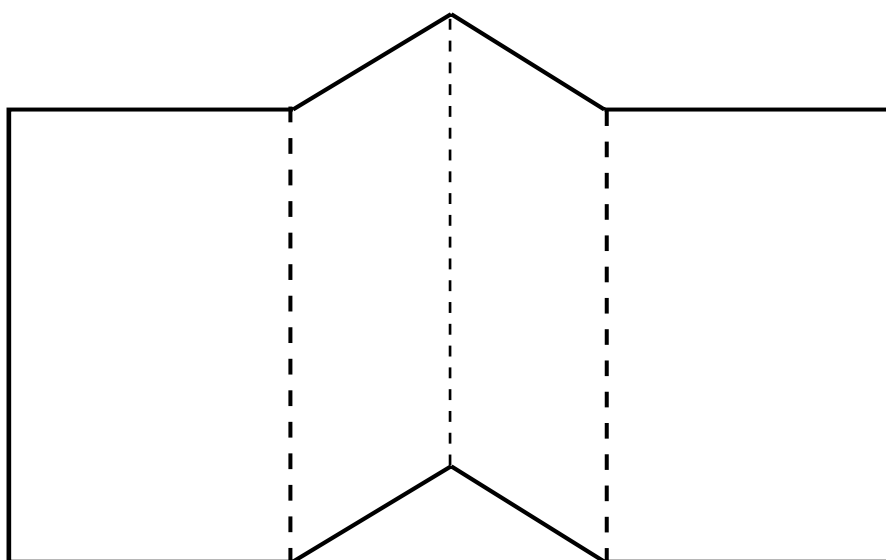


Curriculum Link

Sequence chronological events and know the days of the week.

Fold a piece of paper in half.

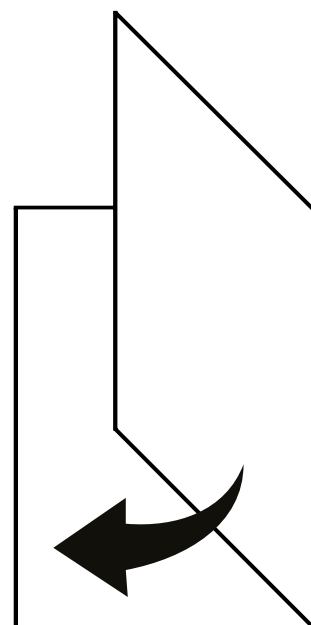
1. Now fold it a different way.
2. What is the same? What is different? Why?
3. What about folding a different size piece of paper?
4. What happens if you fold the paper in half and then half again?



Helpful hint: Talk about the shapes made using top, bottom, half, quarter, left, right, rectangle, square, triangle.

Family comments:

Child comments:



Challenge –
Can you cut a circle
and fold it in half?
And fold it
in half again?



Curriculum Link

Recognising and combining halves and quarters as parts of a whole.

Sharing lollies



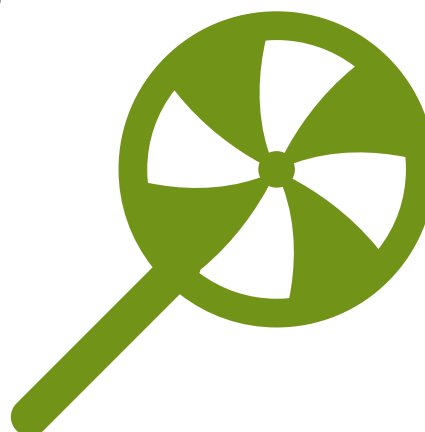
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In the cupboard are a bag of 6 orange lollies and a bag of 4 green lollies.

How could these be shared fairly between 4 friends?

Can you find another way?

If there were 2 of each bag, would this make it easier to share?



Helpful hint: Use counters or other small objects to represent the sweets or draw pictures to help understanding. Talking about equal sharing is valuable.

Family comments:

Child comments:



Curriculum Link

Through sharing small quantities, begin to understand multiplication and division.

Trooping the Colour



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When Trooping the Colour takes place in London, all the guards march in front of the Queen. This is a photo of some. There are hundreds of guardsmen and they all have to be in line.



Can you find some small toys and line them up to pretend the Queen will look at them? How many are in each line? Can you make each line the same? Are there any left over? Can they march in pairs (2s)? Can you count them in 2s? How many altogether?

If you were a guard, how many steps does it take you to march across the room? Or across the garden?

To find out more, look at:

<http://resources.woodlands-junior.kent.sch.uk/customs/trooping.html>

Family comments:

Child comments:



Curriculum Link

Counting to and across 100; counting objects in 2s; recognising odd and even.

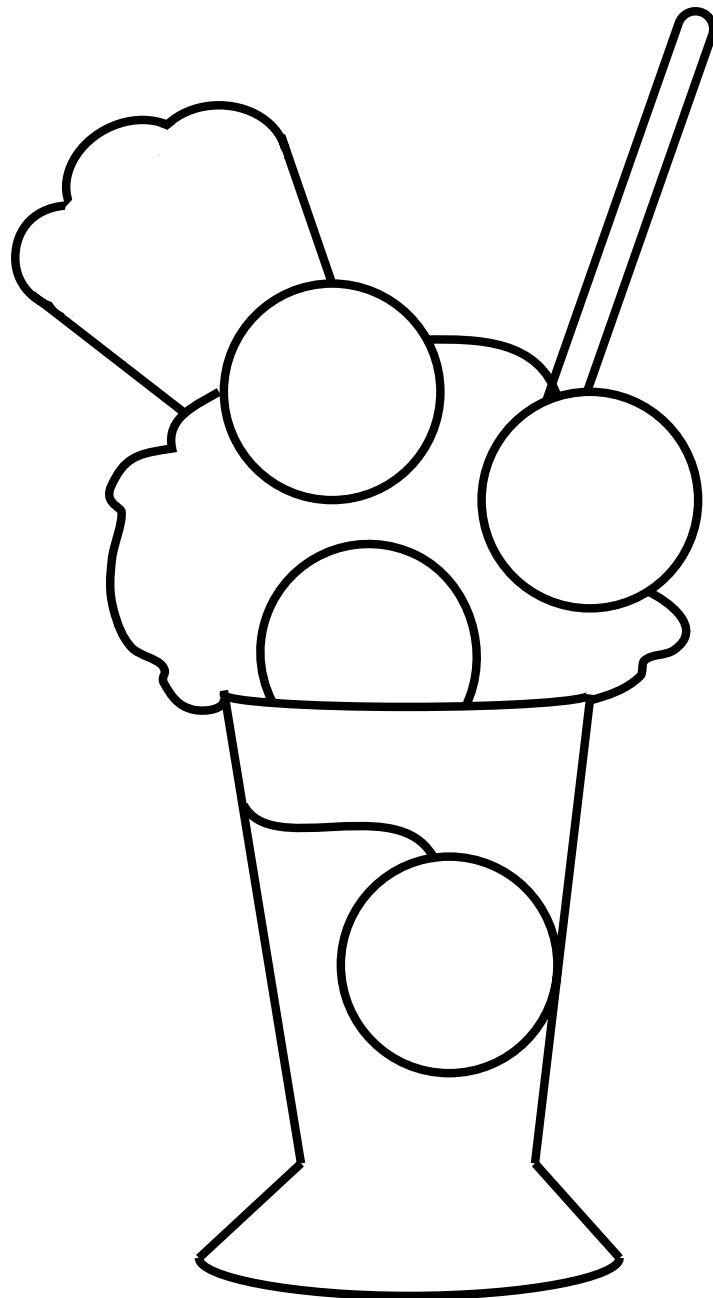
Yummy ice cream sundaes!



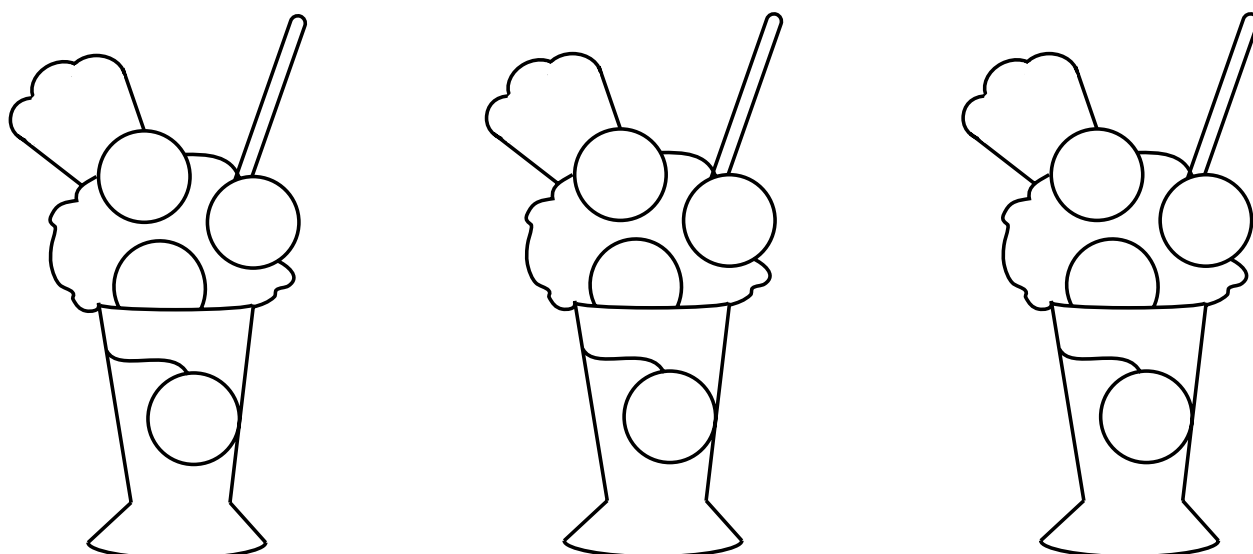
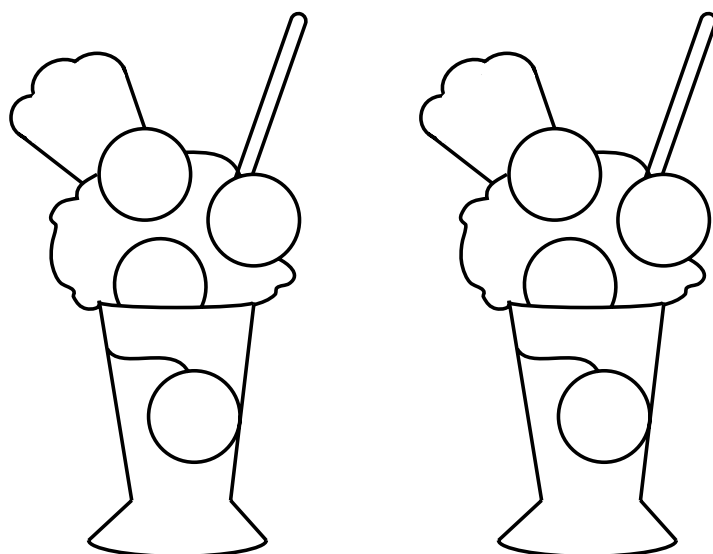
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**Choose your 3 favourite
flavours of ice cream.**

Colour in the scoops in your favourite flavours.



Now keep the same flavours but colour them in a different order...remember, we want all our ice cream sundaes to look different!



Family comments:

Child comments:



Curriculum Link

Solve a mathematical problem, working systematically and explain reasoning.

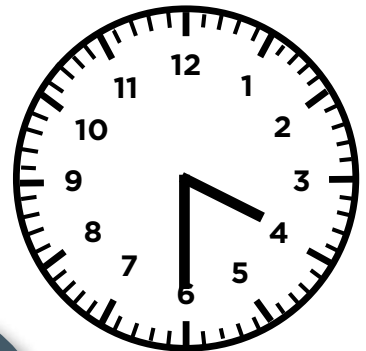
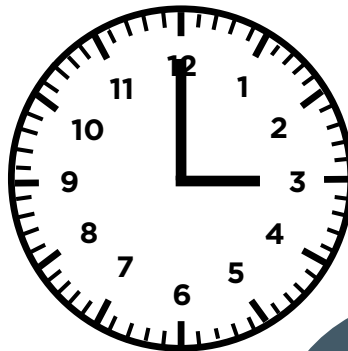
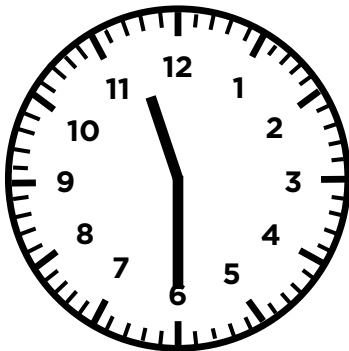
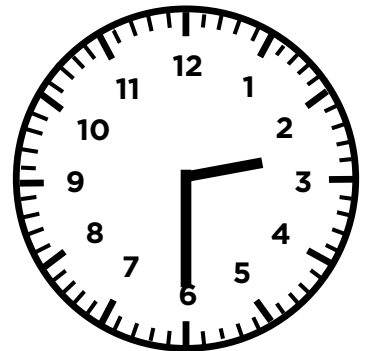
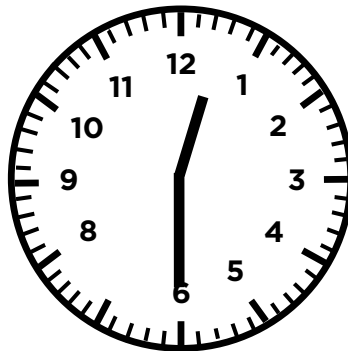
What time is it?



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Cut out the clocks and put them in order.

What might you be doing at these times?



Challenge –
Talk about
night times
too!

Family comments:

Child comments:



Curriculum Link

Use the language of
time and recognise
the hour and half past.

Y1/Ages 5-6

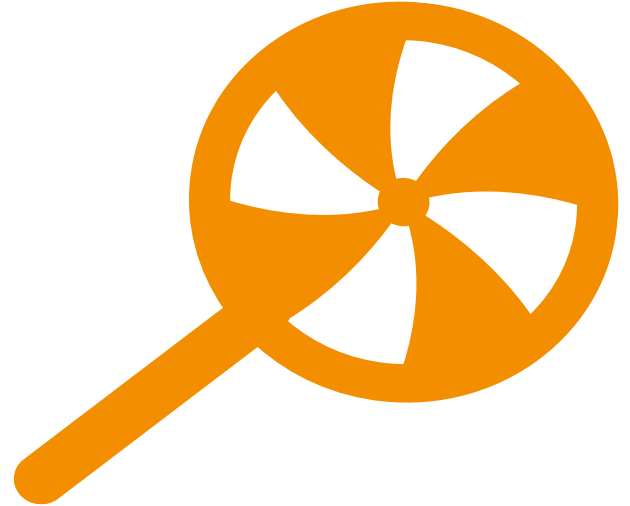
Activities answers



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Monkey addition fun

- 5 wet noses
- 10 little ears
- 20 legs
- 5 curled tails
- 20 legs
- 10 bright eyes
- 8 legs on the slide



Traditional story maths

1. 10
2. 7
3. 14
4. 14
5. 10



Sharing lollies

- 2 each of any colour (2 left over)
- 1 green and 1 orange each (2 left over)
- $2\frac{1}{2}$ each
- Yes – 5 each
- 3 orange and 2 green each

