



National Numeracy

# Schools & Families Programme

[nationalnumeracy.org.uk](http://nationalnumeracy.org.uk)



Please complete this  
survey whilst you are  
waiting!

# Aims of the Schools & Families Programme

- To increase pupils':
  - confidence with numbers,
  - positive feelings about maths,
  - awareness of the value of maths outside the classroom.
- To increase parents', carers' and school staff's confidence in supporting children with maths.
- To establish lasting approaches and strategies that will continue in schools beyond the end of the programme.



# How do you feel about maths?

[youtube.com/watch?v=pKdA0LCNg2s&source\\_ve\\_path=MTc4NDI0](https://youtube.com/watch?v=pKdA0LCNg2s&source_ve_path=MTc4NDI0)



# Discussion



**How do you  
feel about  
maths?**



# National Numeracy's top tips for families

1

**Point  
out maths in  
the real world**



2

**Be positive  
about  
maths**



3

**Praise effort  
rather than  
talent**



4

**Improve  
your own  
confidence**



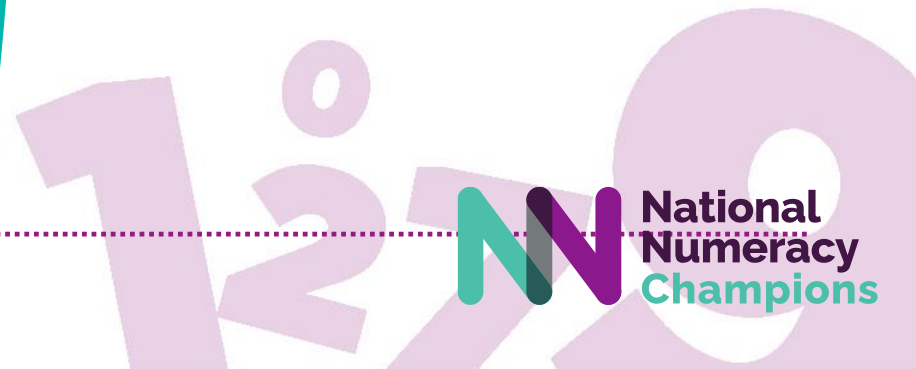
# National Numeracy's top tips for families

<https://www.youtube.com/watch?v=NzJNDQFM7bs>





Point out the maths  
in everyday life



# Maths in everyday life

## Where do we see maths and numbers in everyday life?

*"Students' motivation to learn maths is higher among students whose parents discuss how mathematics can be applied to everyday life," (The Programme for International Student Assessment 2013).*



# Discussion



**Where do we  
see maths and  
numbers in  
everyday life?**

# Maths in everyday life



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## Planning journeys

- Using time
- Reading timetables



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## Shopping

- Recognising coins
- Checking change
- Working out sale prices
- Using a budget

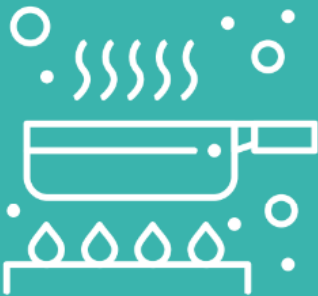


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## D.I.Y.

- Measuring materials
- Using ratios to mix materials

# Maths in everyday life



## Cooking

- Counting and weighing ingredients
- Using metric and imperial measurements
- Scaling up recipes



## Making financial decisions

- Setting up a monthly budget
- Interest rates



## Reading the news

- Understanding graphs
- Understanding facts and figures, including percentages



Be positive about  
maths




# Be positive about maths

Here are some things people sometimes say to children about maths.

- Have you heard these things being said?
- What could be said instead to encourage positive attitudes in children?



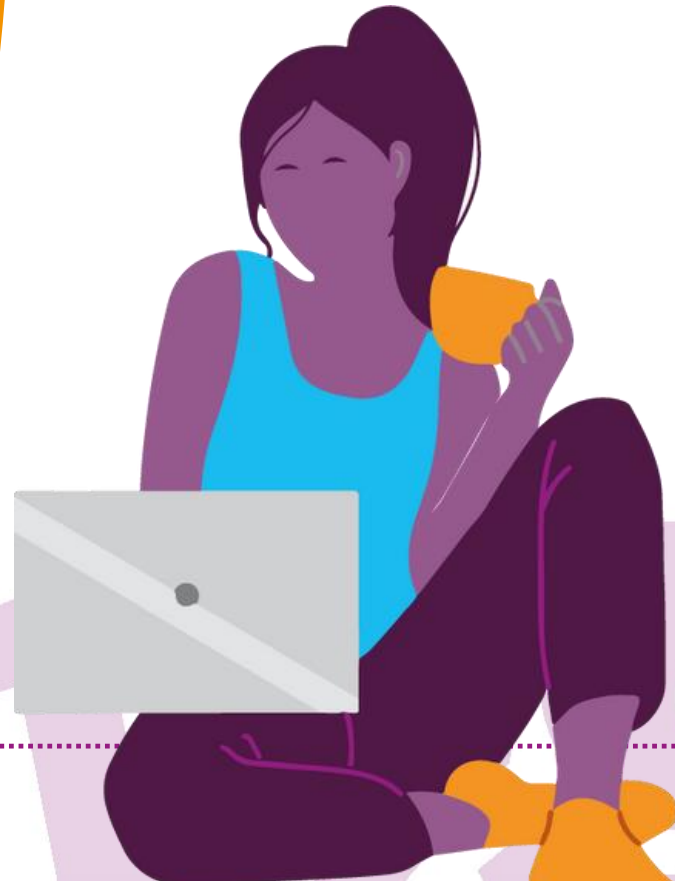
# Be positive about maths



**“I was never any good at maths at school and it did me no harm.”**

# Be positive about maths

**“You won’t need  
to worry about  
maths once  
you’ve finished  
school.”**



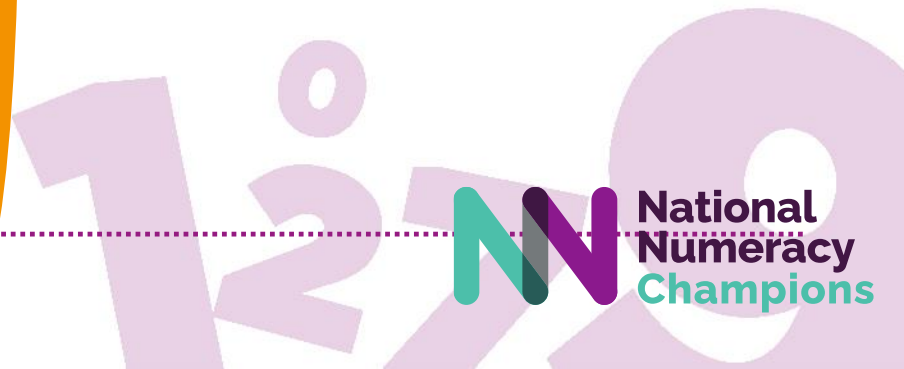
# Be positive about maths

**“Well done for getting that right. You’re so clever.”**





**Praise effort, rather  
than talent**



# Praise effort, rather than talent

## **Praising talent:**

Well done. You're so clever.

You're naturally really good at this.

It's amazing that maths is so easy for you.

## **Praising effort:**

Well done for working so hard at that.

You've learned so much, well done.

It's great that you kept going with that even when it was tricky.

# Growth Mindset

## Fixed Mindset

Talent is innate

Some people just can't do certain things

There is no point in trying to improve if you aren't born with the ability

## Growth Mindset

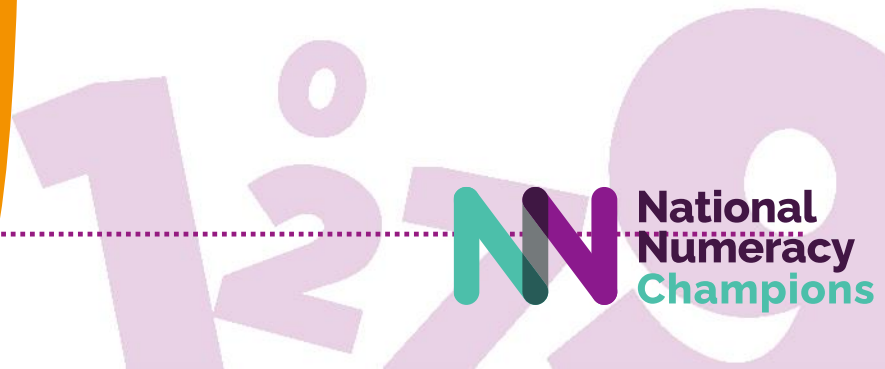
Ability is not fixed

You can learn and improve at anything if you put enough time and effort into it

If you put your mind to it, you will be able to improve: ability isn't something you're born with



**Boost your own  
confidence**



# Family Maths Resources

- Everyday maths activities
- Encourage positive conversations at home
- Complete as a family
- Related to seasonal events, holidays and everyday maths
- Open-ended investigations
- Scrapbooks



# Family Maths Resources

## 3D shapes

**Family Maths Toolkit**

Find objects around the house which are 3D shapes and see how many 2D shapes there are on the object.

For example, a can of beans is a cylinder and it has 2 circles, one at each end and the middle is a rectangle.

cube

triangular prism

cone

cuboid

cylinder

square based pyramid

How many did you find?

**Family comments:**  
We had lots of fun running about the house looking at all the 3D shapes there is alot. It's been along time since I really looked at objects and tried to work out the 3D and 2D shapes

**Child comments:**  
ME AND MUMMY HAD FUN LOOKING FOR 3D SHAPES

**Curriculum Link**  
Identify 2D shapes on the surface of 3D shapes, for example a circle on a cylinder and a triangle on a pyramid.

familymathstoolkit.org.uk

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for everyone, for life

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am glad to hear how much you

ATM OF SWEETCORN

CYLINDER

2D SHAPE  
2 circles  
rectangle

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4 in a row

2D SHAPE  
4 rectangles  
2 squares

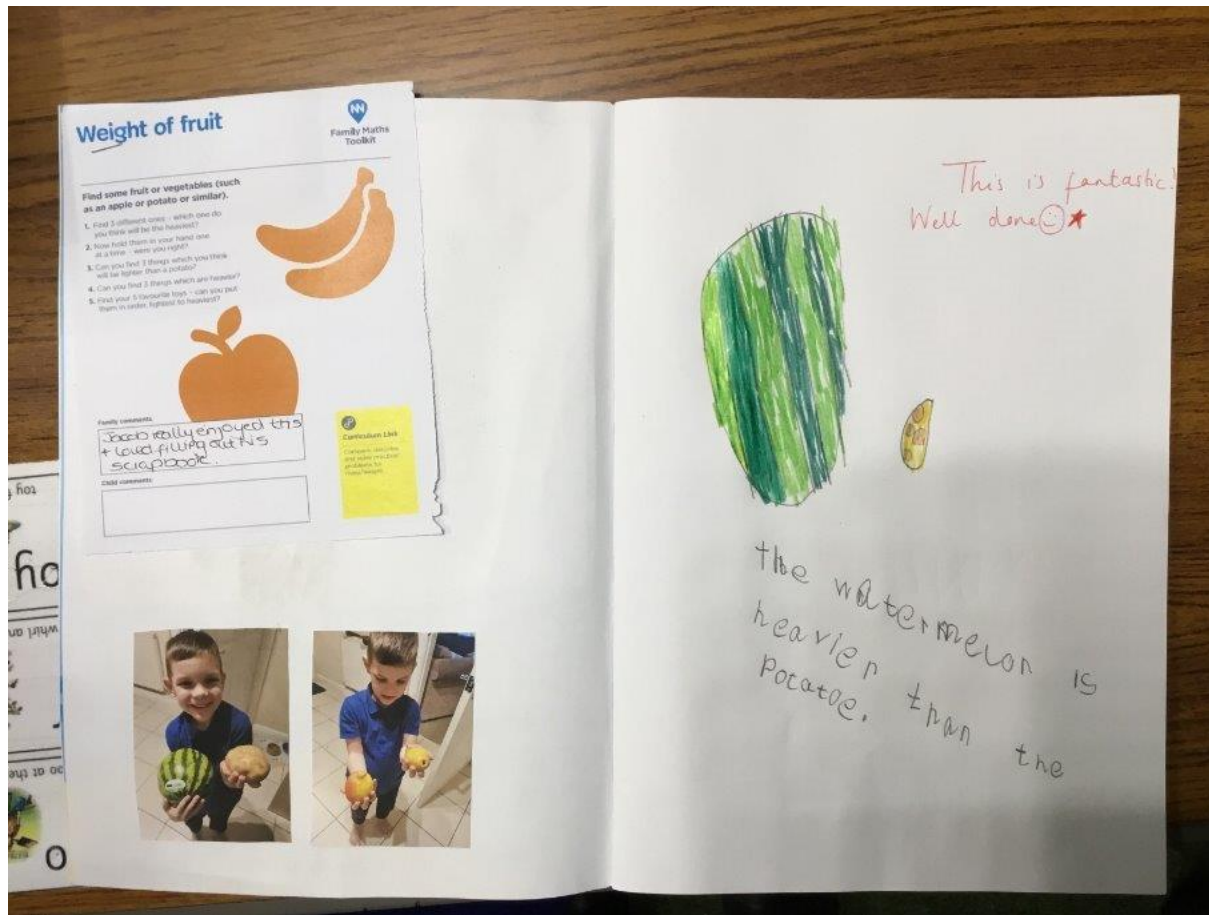
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icecream

cone


2D SHAPE  
circle  
triangle

# Family Maths Resources



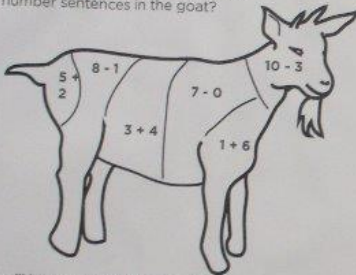
# Family Maths Resources

## Chinese New Year

  
Family Ma Toolkit

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?



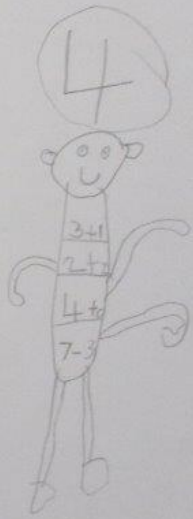
Next year 2016 will be the year of the monkey - can you draw a simple monkey and put some number sentences inside? One of monkey's lucky numbers is 4 - can you make all your number sentences have 4 as an answer?

**Family comments:**  
Milo loved doing this and was confident making up his own number sentences too.

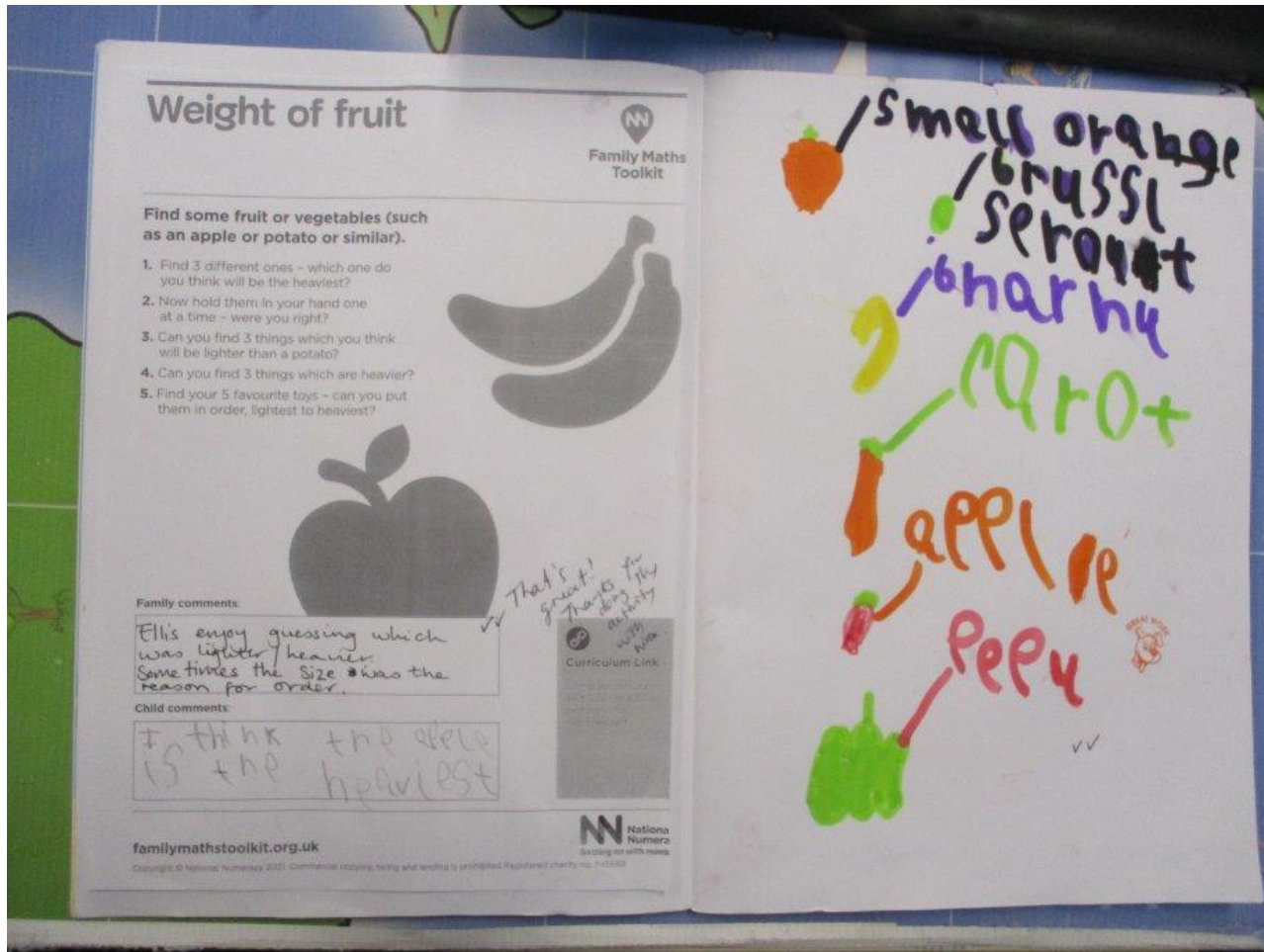
**Child comments:**  
"I think it was great and now I've learnt about these animals' lucky numbers!"

  
**Curriculum Link**  
Addition and subtraction number bonds to 10, including zero.

5 + 2 = 7 ✓  
8 - 1 = 7 ✓  
3 + 4 = 7 ✓  
7 - 0 = 7 ✓  
1 + 6 = 7 ✓  
10 - 3 = 7 ✓



# Family Maths Resources



# National Numeracy Challenge

