



Launch of the Mereworth Maths Passport

21st September 2016

Maths Passports

- Purpose of the Passport
- Relevance
- What is the Passport?
- Example of how a Maths Passports work?
- Initial Passport Management
- Maths Passport in action
- Ideas to support your child

Purpose of the Maths Passport

- The purpose of the 'Maths Passport' is to help your child gain a **quick** and **accurate recall** of the **key items of Maths knowledge** for their level.
- This knowledge will enable them to **develop a broad range of strategies to solve mathematical problems efficiently**, and help them gain success in Mathematics.

Why the Maths Passports develops important life skills:

In Maths, the important part is to be able to use the basic skills – such as **number bonds, multiplication tables, halving, doubling -- in problem solving and real life applications.** If you want to know what is the best value in the supermarket, you need to be able to work out the price per 100g of a product when it comes in different sizes.

Or you want to buy 4 plane tickets at £160 each. Do we really want our children to have to get out a calculator or use paper and pencil for a simple calculation?

What is the cost of 4 plane tickets at £160 each?

Method 1 Use times tables

$4 \times 100 = 400$ $4 \times 6 = 24$ so 4×60
is 240
 $400 + 240 = \text{£}640$.

Method 2 Use doubling

Double 16 is 32, double 32 is 64.

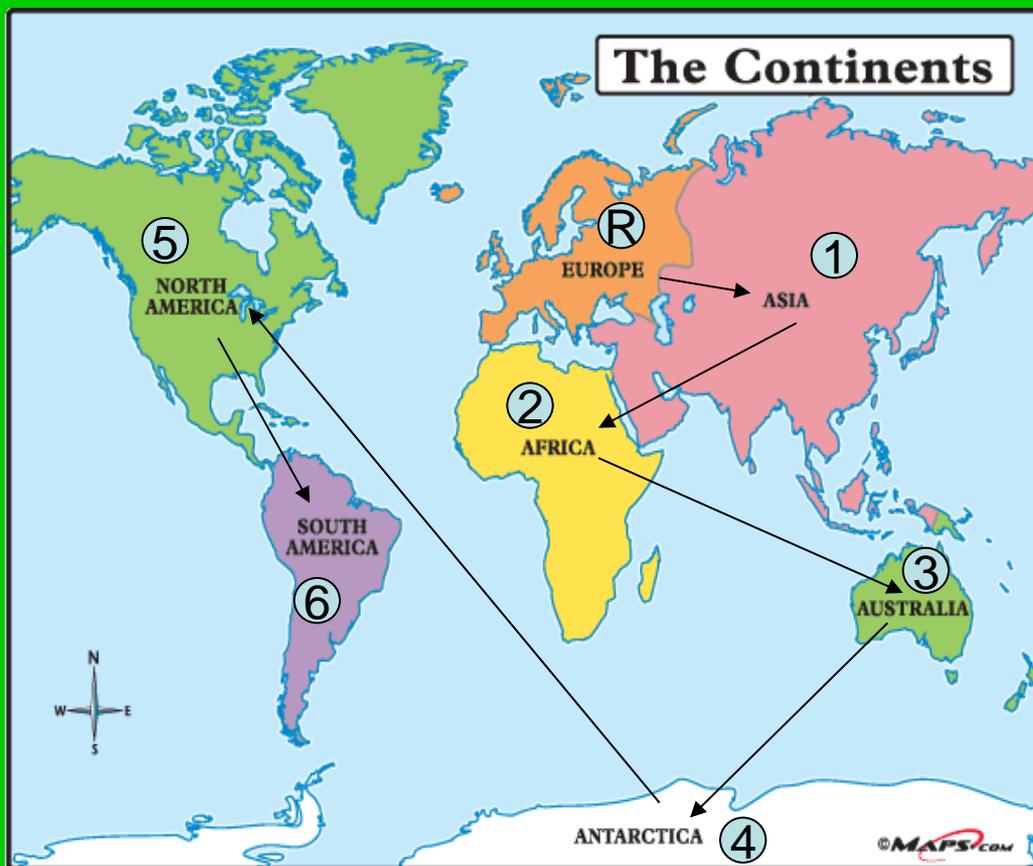
So double 160 is 320, double 320 is £640.

It doesn't matter which way you work it out, as long as you know what to do and can work it out quickly.

What are the Maths Passports?

Passports are based on the continents of the world. There are currently 7 passports – from Reception to Year 6:

- Europe Yr R
- Asia Yr 1
- Africa Yr 2
- Australasia Yr 3
- Antarctica Yr 4
- North America Yr 5
- South America Yr 6



How do Maths Passports work?

- Children travel around the World, from Continent to Continent beginning in Europe and ending in South America.
- Each Continent has mental calculation objectives that pupils achieve.
- The passport travels up through the school with the child and shows progression.
- Children will be awarded a certificate when the objectives of a Continent are achieved.

Example of how a Maths Passport works

Asia



Maths Passport

Name

DOB

Class

Asia Targets

- **You are now heading towards Asia. (Yr 1)**
Your targets are:
- To count in 2s.
- To count in 5s.
- To count in 10s.
- To count in 1s forwards and backwards over 100.
- Know by heart all +/- fact for each number to 10
- Know doubles to 10.
- 1 more and 1 less for numbers to 100

Asia – Answers to +1

Task 4 +1	8	2	7	1	10	6	4	3	9	5
Time 30 Secs	9	3	8	2	11	7	5	4	10	6

Asia

Asia	Date Achieved	Date Achieved	Date Achieved
To count in 2s.			
To count in 5s.			
To count in 10s.			
To count in 1's forwards and backwards over 100.			
by Know heart all +/- facts for each number to 10.			
1 more and 1 less for numbers to 100			
Know doubles to 10.			

Initial Passport Management

- Teachers have assessed the children at the end of Term 6 2016 to find out which Continent they should be on.
- Baseline assessment so future progress can be measured.

Maths Passport in Action

- All children have **30 seconds to answer 10 questions** which will be **assessed weekly** in Class
- **Passport practice** as part of the **Maths lesson starters** and at **home**
- **Continent Objectives** are on the website so you can practice the skills with your child
- **Evidence of achievement** in the Passport and from receiving a certificate to acknowledge success

Ideas to support your child

- Mereworth School Website:

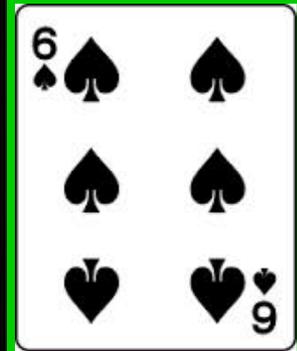
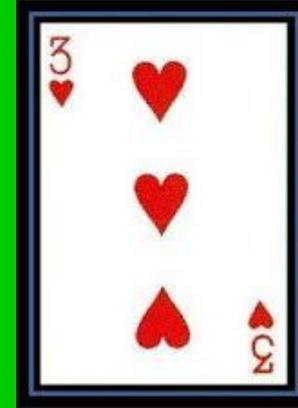
Examples and question pages for each continent

Hyperlinks for each area to other interactive websites

Continent examples and questions - Asia

Year 1 - Asia	Examples	Can your child answer these questions?
Know by heart all number bonds to 10	$0+10 = 10$ $1+9 = 10$ $2+8 = 10$ $3+7 = 10$ $4+6 = 10$ $5+5 = 10$ $6+4 = 10$ $7+3 = 10$ $8+2 = 10$ $9+1 = 10$ $10+0 = 10$ $10 - 9 = 1$ $10 - 8 = 2$	What would you add to 7 to get a total of 10? Use number cards from 1 to 9 – can you pair the numbers which make 10? How many pairs of numbers can you remember that make a total of 10?
Count in twos		How far can you count in twos? What number would follow in this sequence: 6,8,10,12....? How far can you continue the sequence What about this sequence? 18,16,14,... What would come next? Can you get back to 0?
Count in tens		How far can you count in tens? What number would follow in this sequence: 40,50,60,? How far can you continue the sequence What about this sequence? 90,80,70,... What would come next? Can you get back to 0?
Count in fives		How far can you count in fives? What number would follow in this sequence: 45,50,55,60,? How far can you continue the sequence What about this sequence? 80,75,70,65,... What would come next? Can you get back to 0?
Recall the doubles of all numbers to at least ten	Double 1 is 2 Double 2 is 4 Up to Double 10 is 20 And beyond...	I roll double 3 – what is my score? Pick a number, and then double it. What is the largest number you can double? Explain how you know your answer is right... I doubled a number and got 18... which number did I double?

<http://www.randomlists.com/draw-cards>



Addition

Complete number or bonds – the number + ? = 10
This can be repeated with two cards making 100.

The cards added together. (this can be used for two cards)

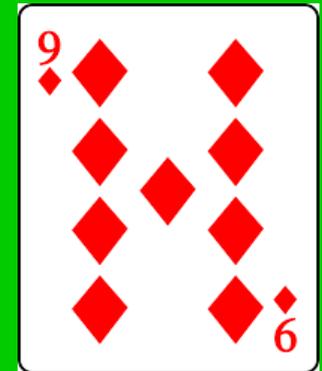
Subtraction

The higher card subtract the lower card

Multiplication

stick with one table and multiply by playing card
turned over

Use two cards – multiply the one by the other.



Number Plate Ideas

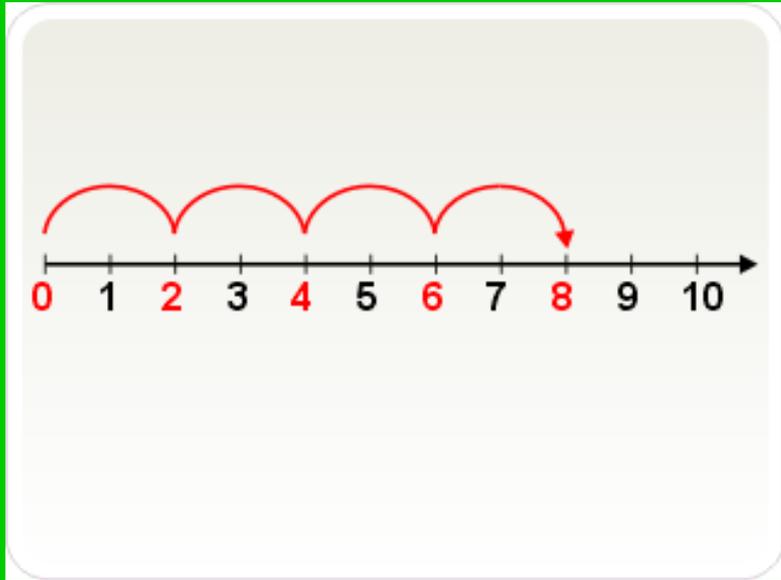


Add the digits together, put the digits in order, what are the missing numbers if you were counting?

What is half of the number?

Look at two number plates – say the number on each – which one is smaller / larger? How much is the difference?

Multiply the digits together.



Number lines and hundred squares can be used to practise counting forwards and backwards in multiples of 1, 2, 5 and 10.

Remember

The ideas are not limited

Try and have FUN with numbers.

The aim is to be QUICK and ACCURATE at all the key skills which will help in all areas of maths.

Use websites to help including the school one: