

2015

Planning a Maths Week



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Disclaimer:

This document was written some time ago and as such Year Group ideas are not necessarily aligned to Curriculum 2014 expectations – there are however a great many handy ideas for planning and preparing a Maths Week.

The First Steps

- Decide on the format of your week. Will all classes be involved? Key Stage 1 only? Year 6 only? The “Maths week” may run over a series of individual Maths Days spread over a term, a year or it could be a true “Maths week”.
- You may decide to have a theme to provide a clear focus and will need to take into account your colleagues strengths and interests. E.g. of themes –history, art, the environment.
- Draw up a list of possible activities by discussing the idea with your staff.
- A very good publication if you are considering a Maths Week at your school is: Maths All Week – June Loewenstein

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Aims

The aims of your maths week may include –

- To develop the pupils knowledge and enjoyment of mathematics
- For the children to enjoy maths together
- To develop the children’s awareness of links between maths and other subject areas
- To have a chance to try new things
- To develop thinking skills
- To raise standards

Ideas for a maths week activities

Assembly

Begin the week with a whole school assembly and set a task for the children

KS1 – Think up a maths logo or a character to represent maths in your school

KS2 – Think up a slogan to introduce a special maths assembly at the end of the week.

Competition

Hold a competition for children, teachers and parents to get involved in, just for fun.

Maths Trails

This is a great way to involve the children in their learning, and the adults in school, or visiting school, will enjoy it too.

A good maths trail needs some questions that can be answered immediately and some that involve collecting materials to take back to the class for follow up work.

Questions can cover time, number, calculating, shape, data etc and obviously must link to your school building and grounds.

The maths trails will need timetabling and will need extra adults to be available.



Here are some ideas of trails for different age groups – but obviously, these will need amending to suit your school.

EYFS - Maths Outside



Number

How many...

Windows in our school building?

Trees on our school fields?

Doors into our school?

Outdoor games:

Number track/square

E.g. roll the dice, move that no. of squares / pick a number card, stand on that number.

Shape and Space:

E.g. find a leaf each, which is the biggest/smallest, put them in size order / find a square, rectangle, triangle, and circle in/on the buildings/cars



Year One Maths Trail



Number

How many...

Windows in our school building?

Trees on our school fields?

Doors into our school?

Outdoor games:

Number track/square

E.g. Pick a number card, stand on that number / Pick a number card, add two and stand on the answer / Roll the dice, move that no. of squares

Using PE:

Count how long it takes to run a distance in 'seconds' / Measure how far can you jump

Shape and Space:

Find a leaf each, put them in size order / How many different shapes can you see in/on the playground/buildings/cars?

Data Handling:

E.g. Find a leaf each, sort them into groups. Explain your reasons.



Year Two Maths Trail



1. How many bars are there on the gate from the playground to the car park?
2. How many trees are there on our school fields?
3. How many creatures are there on the mural?
4. What else can you count on the mural? Make up a question for another group.
5. What can you count on the small yard? Make up a question for another group.
6. If there was five times the number of benches on the playgrounds, how many would there be?
7. If the school was double the size, how many doors leading outside would there be?
8. If we multiplied the number of trees on our fields by two, how many would there be?
9. If three people could sit on every bench on the small playground, how many people could sit down on them altogether?
10. What is the difference between the number of doors and the number of panes of glass in the outside of our school building?
11. Find a blade of grass each, from the hedge, put them in size order. Stick them in the box.
12. Where can you see rectangles on the school buildings?



Year Three Maths Trail



1. How many benches are there on the playgrounds?
2. How many windows are there on the outside of our school building? How will you count them e.g. as whole windows or as panes of glass?
3. How many bars are there on the gates leading out of the school playgrounds?
4. How many creatures are there on our mural?
5. What else can you count on the mural? Make up a question for another group.
6. How many rows of bricks high is our school building?
7. Estimate how many concrete slabs there are on the small playground.
8. How many wheels are there in the car park? How can you work it out without counting them all?
9. If there were five times the number of benches on the playgrounds, how many would there be?
10. If we multiplied the number of trees on our fields by three, how many would there be?
11. If five people could sit on every bench on the playgrounds, how many people could sit down on them altogether?
12. What is the difference between the number of single doors and the number of double doors leading out of our school building?
13. If the mural were two times bigger, how many creatures would be on it?
14. How many different shapes can you see in/on the school buildings? Draw them in the box.
15. Find a leaf each and sort them into groups. Explain why you grouped them in that way. Stick them in the box.



Year Four Maths Trail



1. How many benches are there on the playgrounds?
2. How many windows are there on the outside of our school building? How will you count them e.g. as whole windows or as panes of glass?
3. How many bars are there on the gates leading out of the school playgrounds and fields?
4. How many sea creatures on our mural have got blue on them?
5. What else can you count on the sea mural? Make up a question for another group.
6. Approximately how many bricks do the blackboard on the wall outside ----- classroom cover up?
7. On the number track or number square outside, find all the multiples of three. Now find all the multiples of four. Are there any that are in both lists?
8. How many wheels are there in the car park? How could you work it out without counting?
9. If there were five times the number of benches on the playgrounds, how many would there be?
10. If we multiplied the number of trees on our fields by four, how many would there be?
11. If six people could sit on every bench on the playgrounds, how many people could sit down on them altogether?
12. Find something you could measure in metres, centimetres, millimetres and litres.
13. If the mural was four times bigger, what would be the total number of creatures on it?
14. Find a blade of grass each, from the hedge. Put them in order – you are not allowed to put them in length order. Explain how you ordered them. Stick them in the box.
15. Which shapes with more than four straight sides can you see in/on the playground/buildings? Sketch them in the box. Can you name them?



Year Five Maths Trail



1. How many windows are there in our school? How did you count them e.g. whole windows or panes of glass?
2. How many pieces of metal are there on the gates leading out of the school playgrounds or fields?
3. How many sea creatures on our mural have got yellow on them?
4. What else can you count on the mural? Make up a question for another group.
5. Approximately how many bricks are covered up by the ramp on the wall outside the Year 3 corridor?
6. On the number track or number square outside, find all the multiples of three. Now find all the multiples of six. Are there any that are in both lists?
7. How many wheels are there in the car park? How did you work it out?
8. If there were five times the number of benches on the playgrounds, how many would there be?
9. If the school was three times the size, how many doors leading outside would there be altogether?
10. If we multiplied the number of trees on our fields by seven, how many would there be?
11. If eight people could sit on every bench on the playgrounds and six people could stand between them at the same time, what is the total number of people who could be on the benches?
12. What is the difference between the number of doors and the number of panes of glass on the outside walls of our school building?
13. If the mural was four times bigger, how many sea creatures would be on it?
14. Where can you see parallel lines on the Year Four/Five outside wall?
15. Where can you see perpendicular lines on the Year Four/Five outside wall?
16. Find a blade of grass each, from the hedge. Put them in order – you are not allowed to put them in length order. Explain how you ordered them. Stick them in the box.
17. How many right angles can you see on the large netball court?



Year Six Maths Trail



1. How many windows are there in our school? How did you count them e.g. whole windows or panes of glass?
2. How many pieces of metal on the gates leading out of the school playgrounds or fields?
3. How many creatures are there on our mural?
4. What else can you count on the mural? Make up a question for another group.
5. Approximately how many bricks are covered up by the ramp on the wall outside the Year 3 corridor?
6. Approximately what percentage of the large playground is used for the large netball court?
7. If there were thirteen times the number of benches on the playgrounds, how many would there be?
8. If the school was nine times the size, how many doors leading outside would there be?
9. If we multiplied the number of trees on our fields by twenty-four, what would the total number of trees be?
10. If seven people could sit on every bench on the playgrounds and we decided to double the number of benches we had, how many people could sit down on them?
11. What is the difference between the number of doors and the number of panes of glass on the outside of our school building?
12. If the mural was four times bigger, how many sea creatures would be on it?
13. If 0.5 of the car park gets flooded, how many spaces are left?
14. If the car park was enlarged by 50%, how many cars would it hold?
15. Find a blade of grass each, from the hedge. Put them in order – you are not allowed to put them in length order. Explain how you ordered them.
16. How many acute angles can you see on the large playground?
17. How many obtuse angles can you see on the large playground?



Cross-curricular ideas for Maths Week

Year One Activities

Literacy

Reading fiction books with a maths theme

ICT

Maths games on Websites

Geography

Maths Trail; go round as whole class, answer in groups then discuss the answers?

Art

Draw a picture based on circles/square/triangles; using stencils as a basis

Music

Sing number based songs and rhymes

DT

Types of food study; sandwiches in the classroom, count how many sandwiches, packets of crisps, apples, yoghurts etc.

PE

Games based on the playground markings

Measure how far you can jump.

Mini competitions; count how many jumps/hops/skips you can do and how many 'seconds' it takes you to run the length of the track.

PSHE

Play Maths games with Year Fours;

Year Six read number stories they have written

Tangram puzzles with Year 5



Year Two Activities

Literacy

Reading fiction books with a maths theme

ICT

Maths games on Websites

Geography

Maths Trail; go round as whole class, answer in groups then discuss the answers, or go round in groups?

Art

Identify shapes in works of art

Music

Sing number based songs and rhymes

DT

Types of food study; sandwiches in the classroom, count how many sandwiches, packets of crisps, apples, yoghurts etc.

PE

Games based on the playground markings

Mini competitions; count how many jumps/hops/skips you can do, how far you can jump and how many 'seconds' it takes you to run the length of the track.

PSHE

Play Maths games with Year 5;

Year Four read number stories they have written

Tangram puzzles with year Six



Year Three Activities

Literacy

Newspaper study; what is the most common number of words in a row of print? What is the most common number of words in a headline? How many times is a number written in your newspaper?

Read and write number poetry

ICT

Maths games on Websites

Geography

Maths Trail; go round in groups then discuss the answers as whole class?

Maps and simple coordinates.

Art

Create designs using Curve Stitching

PE

Mini competitions; estimate then count how many jumps/skips you can do, how far you can jump and how many seconds it takes you to run the length of the track.

PSHE

Play Maths games with Year 6

Year Five read number stories they have written

Tangram puzzles with Year 4

Work out Maths Code breakers with parallel class



Year Four Activities

Literacy

Write illustrated number storybooks for Year Two children

Read and write number poetry

ICT

Maths games on Websites

History

Watch 'Maths through History – Romans' video

Timelines

Geography

Maths Trail; go round in groups then discuss the answers as whole class?

Mapping skills /Coordinates

Art

Create a design using tessellation

Music

Make up a number song/rhyme e.g. numbers in order/times tables

DT

Make Maths Games for Year Ones; to practice addition and subtraction bonds to 20

PE

Measure.

Mini competitions; estimate then count how many jumps/hops/skips you can do, how far you can jump and how many seconds it takes you to run the length of the track.

PSHE

Play Maths games with Year 1

Read number stories to Year Two

Tangram puzzles with Year 3

Work out Maths Code breakers with parallel class



Year Five Activities

Literacy

Write illustrated number storybooks for Year Three children

Science

Make a scale model of the solar system

ICT

Maths games on Websites

History

Watch 'Maths through History – Greeks' video
Timelines

Geography

Maths Trail; go round in groups then discuss the answers as whole class?
Mapping skills/coordinates

Art

Create a border/tile design using translation

Music

Make up a maths rap about counting on/back in tens/hundreds

DT

Make Maths game to practice addition and subtraction up to 30 for Year 2 children
Make 3D shapes; by joining 2D shapes, use stencils for accuracy and Clixi for ideas

PE

Mini competitions; estimate then count how many jumps/hops/skips you can do, how far you can jump and how many seconds it takes you to run the length of the track.

PSHE

Play Maths games with Year Two;
Read number stories to Year Three
Tangram puzzles with Year 1
Work out Maths Code breakers with parallel class



Year Six Activities

Literacy

Write illustrated maths storybooks for Year One children

ICT

Maths games on Websites

History

Research famous mathematicians; using encyclopedias/ICT research, link with drama e.g. hot seating

Geography

Maths Trail; go round in groups then discuss the answers as whole class?

Mapping skills/Coordinates

Art

Mathematical study of a work of art, e.g. shapes used, proportion of colour used, describe position/size of objects. One partnership describes the work of art to another who can't see it, for them to draw.

Enlarging pictures by using a scale grid

Music

Make up a maths rap about the a times table

DT

Make maths game to practice the 2, 3, and 4,5,10 times tables for Year 3 children

Make 3D shapes; by joining 2D shapes, use stencils for accuracy and Clixix for ideas

PE

Mini competitions; estimate then count how many jumps/hops/skips you can do, how far you can jump and how many 'seconds' it takes you to run the length of the track.

PSHE

Play Maths games with Year 3

Read number stories to Year One

Tangram puzzles with Year 2

Work out Maths Code breakers with parallel class



Visits and visitors

Visitors will introduce fresh thinking and ideas to the children and can reinforce links between school and community.

You could invite “ordinary” people into school to talk about how they use numeracy in their jobs. E.g. the librarian, the school cook, a shop owner etc

On the Count on website, there is a sample of individuals in different jobs giving a brief account of the importance of maths in their careers. www.counton.org

Alternatively, you may wish to bring a maths performer into school. Again the count on website provides a comprehensive list of Maths Performers and their contact details.

Writing Number Storybooks

The children will write a story for a young reader, based on maths. Then make it into an appealing product for them, by making it into a small book and/or illustrating it. The children can then share the books with the relevant class.

Themes for the stories could be:

For Year One pupils	Counting up to 20/Adding up to 10 Subtracting up to 10/Comparing size
For Year Two pupils	Counting up to 100/Adding up to 20 Subtracting up to 20/Basic 2D shapes
For Year Three pupils	Counting up to 100/Adding up to 50 Subtracting up to 50/Direction, left and right

There will be many other activities that you will be able to think of and it would be nice to keep a record of the week by taking photographs and creating displays.



Evaluating the week

It would be useful to look back at the aims of your week and identify the strengths and any problem areas. It will also be important to celebrate the successes and hard work.

If you do decide to hold a Maths week or have already held one it would be really helpful if you could Email any activities you have used successfully.

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