Mental Maths Tests - Parents Meeting

June 2018

Objectives

- Share the new style whole school mental maths testing system.
- Understand why the system has changed.
- Know expectations for year groups and the value of recall of basic knowledge.
- Value of parental support.

Previous and New System

- All classes had their own system relating the National Curriculum 2014 year group objectives – for a lot of classes this was just time tables.
- New system is to bring continuity to the whole school and wherever child finishes in a year group they will start at that point the following academic year. This system mirrors the Big Spelling used in literacy.
- The new system also ensures that more areas of mental maths are practised, recalled and used in class as efficient methods.

Witherley Primary School

Mental Maths Test

Level 1 Test 2

Name: _____ Date: _____

10 – 4 = __
10 – 1 = __
10 – 5 = __
10 – 0 = __
10 – 9 = __
10 – 3 = __
10 – 2 = __
10 – 8 = __
10 – 4 = __
10 – 7 = __

Total = __/10

Witherley Primary School

Mental Maths Test

Level 2 Test 4

Name: _____ Date: _____

14 + __ = 20	20 – 7 = __
20 – 13 = __	20 - __ = 5
11 + __ = 20	3 + __ = 20
__ + 12 = 20	12 + __ = 2
20 – 9 = __	20 – 4 = _
__ + 16 = 20	14 + __ =
20 – 0 = __	18 + __ =
20 - __ = 1	20 – 10
0 + __ = 20	4 + __
__ + 3 = 20	20 – 5

Total = __/20

Witherley Primary School

Mental Maths Test

Level 9 Test 3

Name: _____ Date: _____

10x___=450	3.23x__=3.23	___x100=870
1.2x___=12	___x10=540	23x___=2300
___x100=9800	32x10=___	743x___=7430
9.2x___=920	___x10=98.1	___x100=7600
1.2x10=___	54x___=540	___x0.54=54
___x10=9.9	___x54=5400	10x___=320
8.5x___=85	5.1x___=510	8.1x___=81
___x100-98	___x99=990	___x54=5400
8.21x__=82.1	___x0.21=21	3.4x___=340
100x9.43=___	85x100=___	___x98=9800
___x623=6230	10x0.98=___	___x10=9.1
100x___=73	0.99x__=99	100x___=43
___x123=1230	10x___=4.1	___x0.09=0.9
10x___=2.9	3.01x__=30.1	10x___=6540
382x100=___	391x___=3910	___x65=650
4.3x100=___	___x9.9=___	4.21x10=___
76x__=760	0.21x___=21	___x0.08=8
4.2x100=___	3.2x100=___	4.3x__=430

New system

- Series of tests make up a level and each level practises a different area of mental maths.

Level	Objective
1	Number bonds to 10 and addition and subtraction within 10.
2	Number bonds to 20 and addition and subtraction within 20
3	Multiplication and division facts of 2, 5 and 10 times table.
4	Number bonds to 100 and doubles and halves
5	Multiplication and division facts of 3, 4 and 6 times table.
6	Multiplication and division facts of 7, 8 and 9 times table.
7	Multiplication and division facts of all times tables to 12 x 12.
8	10 and 100 more or less than a number
9	Multiplying and dividing a number by 10 and 100 including into decimals.
10	Square, cubed and prime numbers, fractions of an amount and all of the above.

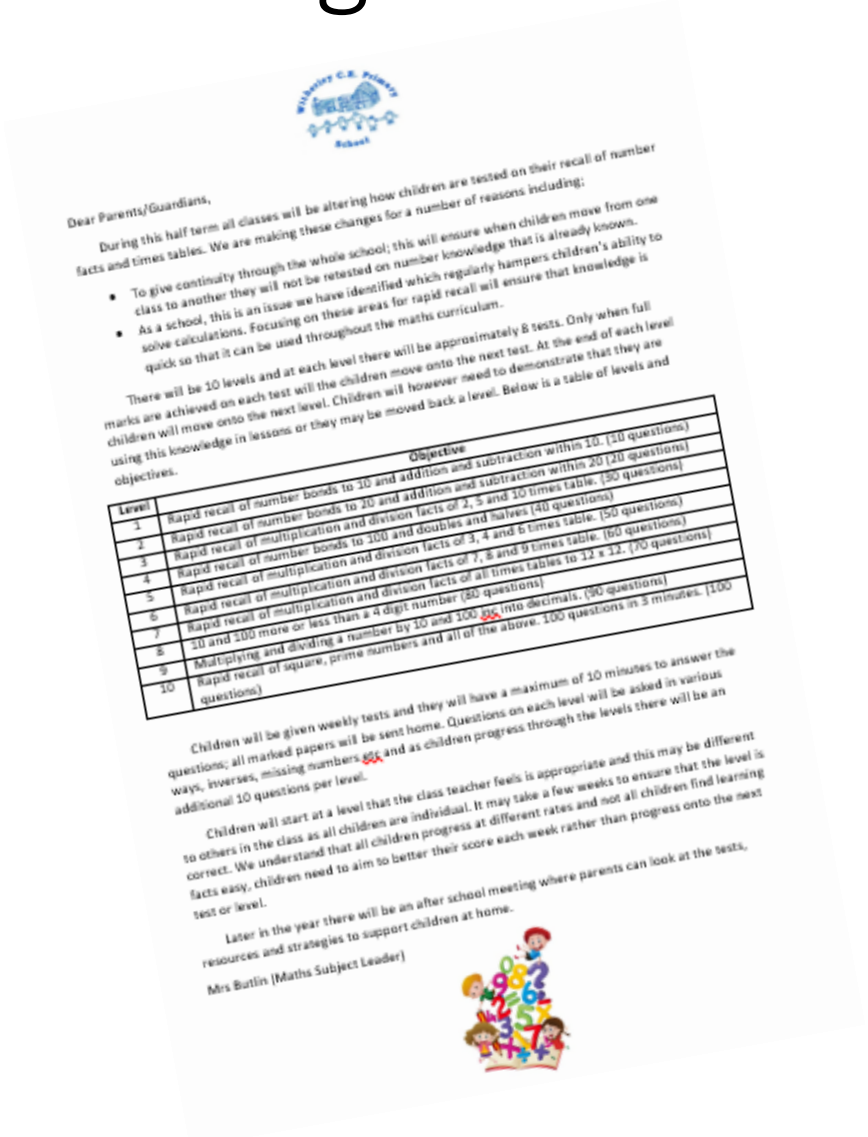
- In all levels questions will be asked in a variety of ways ensuring full knowledge of the facts, e.g. answers at the end and beginning of a calculations, missing numbers, inverse, words etc.

  5 x 6 = ___ 5 x __ = 30 30 ÷ 5 = ___ ___ ÷ 6 = 5

  ___ = 6 x 5 30 = ___ x 5 ___ = 30 ÷ 6

- All tests will be timed – times are subject to teachers knowledge of children (maximum 10 minutes).
- As the levels progress, 10 additional questions will be given.

Changes to the original format



Dear Parents/Guardians,

During this half term all classes will be altering how children are tested on their recall of number facts and times tables. We are making these changes for a number of reasons including:

- To give continuity through the whole school; this will ensure when children move from one class to another they will not be retested on number knowledge that is already known.
- As a school, this is an issue we have identified which regularly hampers children's ability to solve calculations. Focusing on these areas for rapid recall will ensure that knowledge is quick so that it can be used throughout the maths curriculum.

There will be 10 levels and at each level there will be approximately 8 tests. Only when full marks are achieved on each test will the children move onto the next test. At the end of each level children will move onto the next level. Children will however need to demonstrate that they are using this knowledge in lessons or they may be moved back a level. Below is a table of levels and objectives.

Level	Objective
1	Rapid recall of number bonds to 10 and addition and subtraction within 10. (10 questions)
2	Rapid recall of number bonds to 20 and addition and subtraction within 20 (20 questions)
3	Rapid recall of multiplication and division facts of 2, 5 and 10 times table. (30 questions)
4	Rapid recall of number bonds to 100 and doubles and halves (40 questions)
5	Rapid recall of multiplication and division facts of 3, 4 and 6 times table. (50 questions)
6	Rapid recall of multiplication and division facts of 7, 8 and 9 times table. (60 questions)
7	Rapid recall of multiplication and division facts of all times tables to 12 x 12. (70 questions)
8	10 and 100 more or less than a 4 digit number (80 questions)
9	Multiplying and dividing a number by 10 and 100 inc into decimals. (90 questions)
10	Rapid recall of square, prime numbers and all of the above. 100 questions in 3 minutes. (100 questions)

Children will be given weekly tests and they will have a maximum of 10 minutes to answer the questions; all marked papers will be sent home. Questions on each level will be asked in various ways, inverses, missing numbers etc and as children progress through the levels there will be an additional 10 questions per level.

Children will start at a level that the class teacher feels is appropriate and this may be different to others in the class as all children are individual. It may take a few weeks to ensure that the level is correct. We understand that all children progress at different rates and not all children find learning facts easy, children need to aim to better their score each week rather than progress onto the next test or level.

Later in the year there will be an after school meeting where parents can look at the tests, resources and strategies to support children at home.

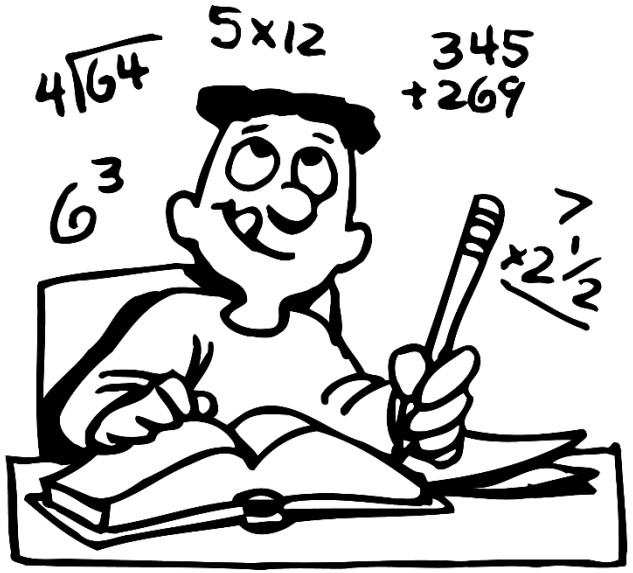
Mrs Butlin (Maths Subject Leader)

During spring term a letter went home with all children about the new tests however we have already made some changes. These are …

- The higher the level the fewer the tests as knowledge is demonstrated with more questions.
- Level 10 now includes fractions of an amount.

Celebrating Achievements

- We don't expect all children to move tests/levels each week however improvement on scores shows progress and will be praised.
- At the end of each level children will get a certificate of achievement in Friday's Celebration Assembly.
- We are also considering other ways of celebrating achieving different levels, e.g. badges, wristbands.



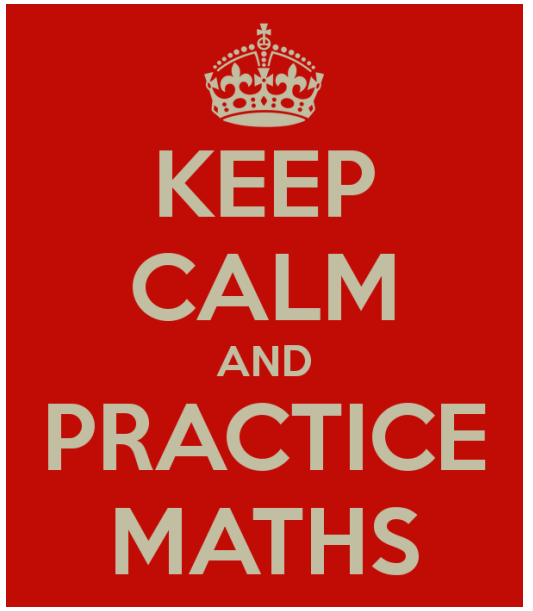
Have a go!

Pick a test, you have 5 minutes, how many can you answer?

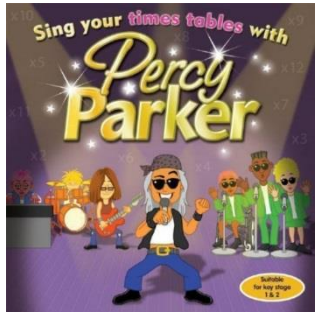
Support from Home

Help from home is invaluable: practise tests, games, incidental learning.

Practising

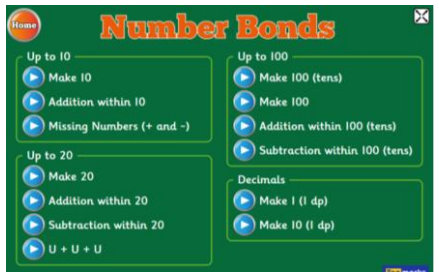


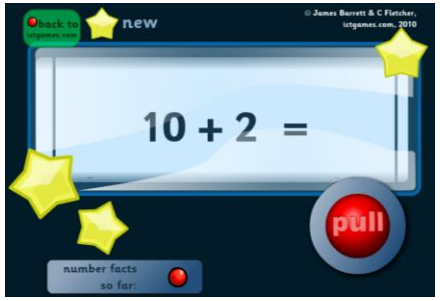
- Weekly tests are being sent home. These are intended to be used to help children identify errors and practise with a time limit.
- Regular chanting and oral testing (daily, short and regular).
- CD songs and videos



- Percy Parker, https://www.youtube.com/watch?v=m3U03MC-SfQ
- BBC Supermovers https://www.bbc.co.uk/sport/supermovers/42612499

Internet Games

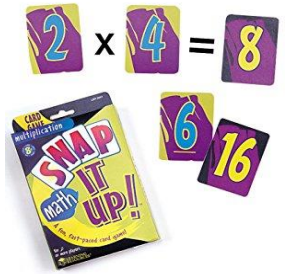




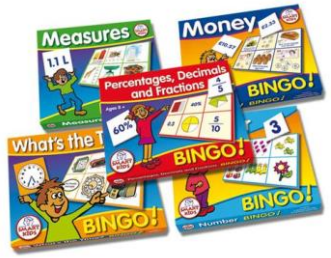
- School subscriptions – *My Maths, Sumdog, Timetable Rockstars.* All children have their own username and passwords for these sites, (if not they can be got from your class teacher.)
- General maths games - https://www.topmarks.co.uk
- Specific sites - https://mathsframe.co.uk/en/resources/resource/253/Bubble-Pop-Number-Bonds
- http://www.ictgames.com/resources.html
- https://mathsframe.co.uk/
- Plus many more!

Games

- Dominoes – pairs to make 10, doubles, halves, multiply numbers together to make an even number etc.

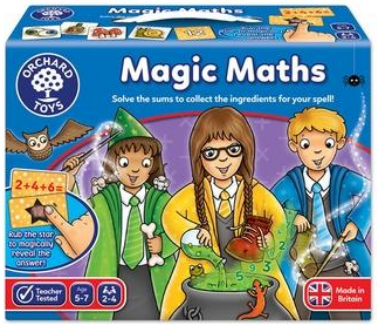


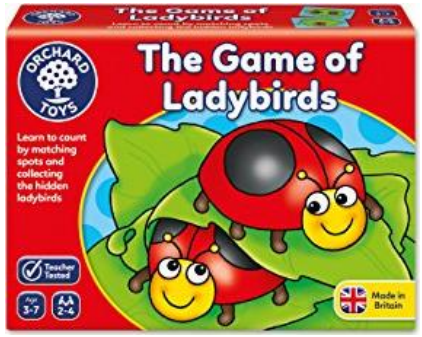
- Snap and pairs – number bonds to 10, 20, rapid recall of simple addition and subtraction.

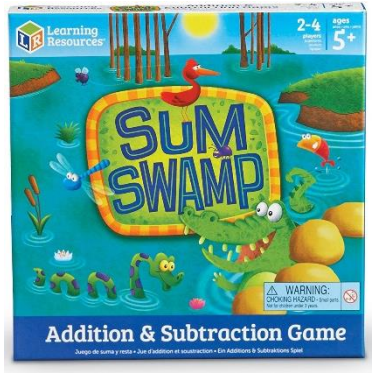


- Bingo – various bingo games can be printed off the internet or bought.

Others







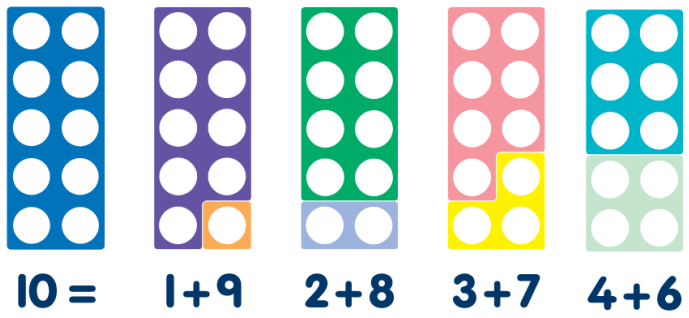
Not all games will directly address test objectives but will enable children to use their knowledge and/or develop skill for the maths test, e.g. using knowledge they know, problem solving, perseverance, decision making, accepting it's ok to be wrong!

Learning around the home

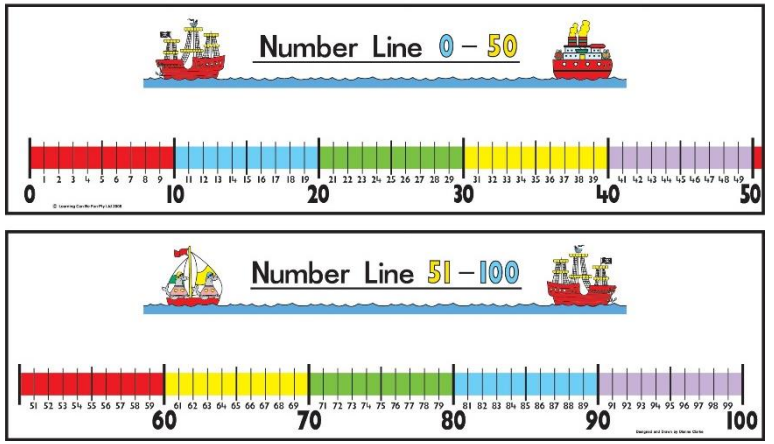
Maths is used everywhere, especially this knowledge…

- Shopping – adding, rounding and working out change.
- Money – knowledge of coins and value.
- Baking/cooking – measuring
- Washing – sorting pairs of socks etc.
- Gardening – counting, grouping, planting seeds in arrays.
- Holidays – budgeting.

Number bonds to 10, 20 and 100



Working out change from £1



Times tables

2 times table

5 times table

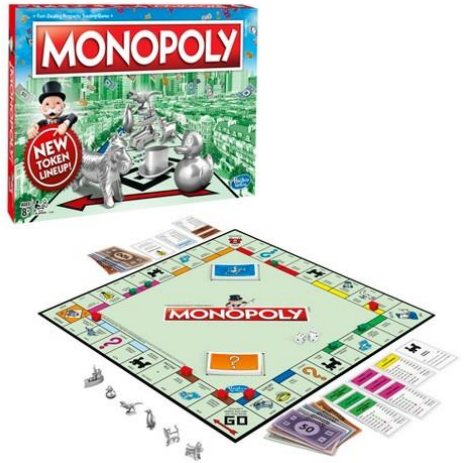
3 and 6 times table

2, 3 or 4 times table

Depends how many in a pack!

How many are there? How would you count?

Fractions of an amount, add and subtract 10 & 100, multiply and divide by 10, 100 & 1000



Scaling up and down

Reading scales – baking, cooking,

Questions?

Please feel free to ask questions and look around at the resources on the tables in the classroom. Think about your child and what would suit your child best!