**Maths Expectations from September 2018**

**TEACHING**

INTENT: The objectives taught are in line with the national curriculum.

IMPLEMENTATION:

*We follow a Mastery method of teaching, so children are not grouped (no stickers on books) and should be taught sat at tables – in rows if preferred (Y1 pupils will be gradually introduced to this method). Assessment opportunities should be planned into every lesson to challenge and support all pupils. We teach to develop and broaden children’s understanding, to ensure they have a deep understanding of concepts at ARE.*

Remember children should be moving from using equipment (concrete), to pictures (visual) to the abstract (CPA).

IMPACT: Children will develop fluency, problem solving and reasoning skills, across all aspects of the curriculum. They will be able to articulate their learning and identify what methods they can use, as well as what equipment or models they could use to meet the Learning Objective. They will have a positive attitude to maths, which is shared with peers. Progress will be 6 points per year, minimum.

**CHILDREN SHOULD NOT BE IN THE SAME GROUP ALL THE TIME, THEY DO NOT HAVE TO BE SAT BY ABILITY, IN FACT MIXED ABILITY PAIRS IS ADVISED**.

Remember Ofsted guidance is: ’The expectation is that the majority of pupils will move through the programmes of study at the same pace.’

 develops depth of understanding and readiness for the next stage.

Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.’

 enables pupils to solve a variety of mathematical problems, applying the mathematical knowledge and skills they have been taught.

**PLANNING Y1-6 – 6 x 1 hour lessons per week at the minimum.**

We follow a Mastery approach where all children are taught objectives for their year group. White Rose units are the starting point, this is supplemented with resources from Power Maths (Active Learn online) and Focus Education (staff shared).

<https://whiterosemaths.com/schemes-of-learning/primary-sols/>

<https://www.tes.com/teaching-resource/wrm-2018-19-autumn-schemes-of-learning-years-1-to-6-11969408>

If appropriate daily counting should be included in planning; this is based upon the non-negotiables for each year group (and should include fraction and decimal work) and times tables work.

The whole school planning proforma, should be used for weekly planning and saved in staff shared (Planning from 2018…).

Identify the SEN, PP, AGT pupils on the weekly planning sheet.

Each lesson must start with Daily Arithmetic, in books, for children to practise and consolidate new learning (4 – 6 questions which are then marked by the children).

**Problem-solving and reasoning, should be planned at least weekly, and shown on the weekly planning. This could be taken from White Rose documents, NCETM Mastery, Focus Maths, Power Maths, or devised by the teacher.**

**Work must be in the book and evidence of Problem Solving and Reasoning should be easily identified (through the L.O.).**

**The Calculation Policy should be followed to ensure consistency across school (see staff shared MATHS).**

**WORK IN BOOKS**

Work should only be completed on sheets when it is vital for achieving the learning, if the work can be written into the books it should be. If sheets are used these should be trimmed and stuck into books and the marking policy used.

Children should use the “one square, one digit” rule to record their work, and be encouraged to show working out methods in their books.

All work should be dated with the short date and include a Learning Objective – **I am learning…** (steps to success are needed if children work independently).

Each new lesson starts on a new page, with the short date and Learning Objective at the top.

**MARKING and FEEDBACK**

Every day during independent work adults should be using the V (verbal instructions given) when circulating around the class. Then go back and tick and add a c (correction) if correct, using blue pen. Children must rewrite their answer, not write over the top.

If children mark their own work, use S.A. they can then draw a small HALO if appropriate.

***When marking after the lesson*** (distance marking):

Tick correct work, anything that is incorrect should be underlined/dotted /indicated using a blue pen.

If children use equipment to achieve the LO write E next to the LO

A HALO against the LO is enough, comments are not needed (but at your discretion).

If there are errors, a blue line is drawn underneath the work and at the start of the next lesson children do their corrections. (An example of how to correct the work may be needed)

If children appear to achieve the objective but it is adult led use the T or TA symbol.

If the objective has not been met and corrections are not appropriate (ie a lack of understanding) add a comment to the work (revisit, work with TA, etc).

**Children do not need a feed forward comment but if they do not have any corrections to complete should be given some form of challenge to do whilst others do their corrections.**

***NEXT LESSON***

Adults circulate and check pupils’ corrections; if correct they tick and add the c, if children are still struggling use the V to indicate a discussion was held with the pupil.

Any children who don’t have corrections should be completing a challenge to apply their learning, or practising fluency.

**RESOURCES**

**Every classroom (AND AREAS OUTSIDE OF CLASSROOMS WHERE CHILDREN WORK) should have:**

Display – multiplication grids, appropriate number lines, appropriate vocabulary for the 4 operations, 2D shape pictures, *calendars in REC & KS1.*

Reasoning question stems (see staff shared MATHS).

Resource boxes on the tables, or easily accessible – multiplication grids, 100 squares, digit cards, number lines, white boards, place value charts, counters, ten frames, dienes, paper ‘bars’.

Maths Dictionaries.

An analogue clock at child height.

RECEPTION AND Y1 SHOULD HAVE AREAS IN THE CLASSROOM WITH A RANGE OF RESOURCES, PLUS ACTIVITIES FOR CHILDREN TO COMPLETE INDEPENDENTLY.

**SUMMATIVE ASSESSMENT Y1-6 (see end of document for more information)**

Each half term an Assertive Mentoring Skills Test is used.

Each term a White Rose Assessment is also used.

**TARGETS**

A target for each child should be identified (with number being a priority). This is likely to be a times tables to learn.

**THE ACHIEVED TARGETS ARE IMPORTANT AND SHOULD BE DISPLAYED AND CELEBRATED (Times Tables ladders should be on display in every classroom – see staff shared MATHS).**

**HOMEWORK**

* From Y2 Times Tables are practised, these should be written in order, in random order and as the inverse (as division facts).
* Y1 should start where children need to move on from the EY outcomes, they then move to learning x10, x2 and x5.
* Once children have achieved the requirements for their year group, a speed table chart should be stuck in the book for practise and consolidation.
* Reception and Y1 children are given number fact work to complete, devised by the teacher.
* If teachers wish to give additional work, parents should be informed.

**TIMES TABLES**

**LESSONS SHOULD BE PLANNED FOR AND TAUGHT**

Children from Y1 upwards will have a weekly times tables test, children practise the tables for homework, in their homework book.

When tested the children should be able to recall in facts in a random order and only be given 5 seconds per question.

When they get full marks two weeks running their **photograph is put next to that table on the ladder/display.**

They should also be learning the associated division facts.

Once they have completed to their year group requirement, they become an **ambassador** and help other children in their class.

They also complete speed tables for homework

Progress should be recorded on the class **spreadshee**t using a X when each times table has been achieved. (staff shared, MATHS, Times Tables).

**ALL CHILDREN NEED TO BE TESTED AGAIN IN SEPTEMBER STARTING AT x2** etc.

Times Tables Tests to be done in the back of the maths book (or separate book in UKS2), dated and marked in blue pen, along with any other Times Tables work.

|  |  |
| --- | --- |
|  | **EXPECTATIONS** |
| REC | Count in 2, 5 and 10 up to 100 from any starting number |
| Y1 | Recall facts for x10, recite x2 and x5 |
| Y2 | Recall facts for x10, x2, x5, recite x3 x4 |
| Y3 | Recall facts for x2 x3 x4 x5 x10 x 11 recite facts for x6 x8 |
| Y4 | Recall facts for x2 x3 x4 x5 x6 x8 x10 x 11, recite x7 x9 |
| Y5 | Recall all facts up to 12 x12 |
| Y6 | Recall all facts up to 12 x 12, division facts for x10, x2, x5 |

**Children who do not complete one table per term to be given extra homework and have intervention out of the maths lesson.**

***Ways to help children include:***

Always write down the times tables – children need to see them.

Learn the multiples first, then add the factors.

Chant forwards, backwards, use different voices.

Paired work writing, reciting, recalling, testing each other.

Use Squeebles – keystagefun online app

Snap games

Dominoes

Top Trumps

Use the counting stick – relate this to division facts too

Teaching Tables (in staff shared) – online games as well as worksheets

Raps etc on youtube.

Complete multiplication grids for each table known, add to this over the year.

Use <http://www.mathsisfun.com/tables.html>

Use <http://www.12xtables.co.uk/>

Maths Bingo on ipads

Battleships game

[www.timestablesme.co.uk](http://www.timestablesme.co.uk)

M**aths Assessment Procedure Y1 – 6 2018**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TERM** | PUPIL | TEACHER | PUPIL | TEACHER | TEACHER |
| **End of**  **Aut1**  **Spr 1**  **Sum 1** | Complete **Skills Test** | Determine an outcome.  File test in Orange File.  Insert outcome to the Tracking Sheet in staff shared. |  |  | Discuss outcomes with pupils on next AM 1 to 1 day.  Use to inform planning and interventions. |
| **End of**  **Aut 2**  **Spr 2**  **Sum 2** | Complete **Skills Test** | Determine an outcome.  File test in Orange File.  Insert outcome to the Tracking Sheet in staff shared. | Complete  **WHITE ROSE TERMLY ASSESSMENT**  (Arithmetic and PSR) | Insert scores to the Tracking Sheet in staff shared.  Determine an outcome of the overall test.  Use White Rose Tracking class sheets for question level analysis  File tests in Orange Files  Keep Class Tracking sheets in own file and use for planning & interventions, share with TA. | Decide on an overall outcome based upon all assessments for the term (plus class work and times tables knowledge).  Add to Tracking Sheet in staff shared.  Input into Classroom Monitor.  Add to Pupil Report Card and share with pupils on next AM 1 to 1 day. |

**Determining the outcome of each test:**

12.5% - Emerging

25% - Emerging plus

37.5% - Developing

50% - Developing Plus

70% - Secure

90% - Secure Plus

*Check the scores for each test, as these may vary.*

*Y6 will also use previous SATs papers.*