

BORROW WOOD PRIMARY SCHOOL

Mathematics Policy



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The Challenge Maths Scheme

At Borrow Wood, we teach maths using the Challenge Maths approach which matches the aims of the Maths National Curriculum. Each objective is normally taught within a week's time frame but this may be shorter or longer depending on the need of the children. Within that week, children will have the chance to work through various different stages from **Emerging** up to **Mastery**.

There are seven stages in all and each stage is designed to support and challenge the pupil's learning. This may be in the form of providing the opportunity for pupils to practise their fluency skills so they can achieve their yearly objective. Or, giving the pupil the chance to answer mastery type questions where they can show their reasoning skills.

The system allows for a clear pace of progression for pupils with different starting points and places no ceiling on learning.

The learning sequence consists of different tasks:

Emerging, Developing, Secure, Using, Applying, Investigating and Mastery

Emerging and developing tasks are designed to allow learners to revisit previous years' objectives or cover the skills they need in order for them to achieve the age related learning objective (i.e. the Secure task).

Secure task– This is the age-related learning objective, with a strong focus on fluency and skills.

At the end of each Emerging, Developing and Secure task children are set a reasoning task. This is an essential part of the learning sequence where children apply their learning.

These tasks are then followed by **Using and Applying** tasks to give children extended practice in using and applying the skills they have acquired.

The **Investigating tasks** are designed to encourage children to reason at much higher levels. They are asked questions about maths, they test out hypotheses and follow lines of enquiry. Children are also encouraged to follow lines of enquiry they themselves have set.

The **Mastery tasks** allow some children to continue to work at greater depth, working on current content but at a deeper level. Rich and sophisticated problems are designed. Problems are presented differently and in as many ways as is possible.

Lesson Structure

Each lesson will have:

- **Maths Probes (At least 3 times a week)/Daily Count and related facts.** These are age related, varying from counting forwards and backwards in whole numbers to counting in decimals and fractions.
- **Arithmetic questions** which are based on question analysis to address gaps.
- **A revisit of previous learning** in response to AfL.
- **Today's teaching**, based on age related expectations.

Assessment

Year groups 1,3,4 and 5 use the White Rose Assessments every term, Years 2 and 6 take past SATs papers throughout the year, to help inform teacher assessment of children's stages, which are: Sig B, WTS, EXS or GDS.

Question analysis is completed on all assessments to identify gaps in learning.

Assessment, along with teacher assessment helps to inform intervention and focus groups.

Homework

Children will complete a weekly skills check for their homework. This will be given out weekly so children can consolidate and progress their learning in-line with their stage objectives.

Times Table Rock Stars and Ultimate Times Table

Each child in KS2 has a log-in for the on-line game, Times Table Rock Stars. Children are encouraged to play this at home and on occasions given the opportunity to play it in school.

Each class in KS2 completes the Ultimate Times Table test once a week. When a child has got full marks on three consecutive occasions, they are awarded their Ultimate Times Table Badge. When they have accomplished this, they work through various other tests, with questions covering multiplication and division facts. After successfully completing these, the children move onto the Ultimate, Ultimate Times Table test, which cover multiplication, division, squared, cubed and cube root questions. When they have completed this successfully on three consecutive occasions, they receive their Ultimate, Ultimate Times Table badge.