

# Subject on a Page- Maths

## Intent – we aim to...

Teach skills that progress from year 3 to year 6

Provide children with opportunities to develop a confident grasp of written methods for four operations

Develop our core 5R Values

Support children in developing children's reasoning and problem solving skills. Allowing them to apply learning in different contexts

Support children effectively to reach their full potential. To effectively identify and address gaps in learning.

Create a love of mathematics. To create positive outlook on the subject and avoiding an "I can't do Maths" attitude.

Provide challenge for all learners to broaden the curriculum.

## Implementation – How do we achieve our aims?

### Planning

Our planning structure is based on the WRM structure, this structure allows children to return to prior knowledge each academic year and allows children to see links within learning. Our medium term structure focuses on fluency, reasoning and problem solving- ensuring that there are opportunities for all elements throughout a unit of work.

We do not follow a specific scheme stringently, we promote teachers using their professional judgement to choose the best resources for their class- using a range of resources including: WRM, Power Maths, I See Reasoning/ Problem Solving, Deepening Understanding etc.

### Assessment

At the beginning of every unit, children complete a pre-assessment which is based on the learning for the previous year- this allows the teacher to identify any gaps in learning. At the end of a unit children complete a WRM assessment- this information is then included on EAZMag- which automatically passes on to the next teacher. This may be used to inform teachers of the need to review learning points before moving on (if a considerable amount of children do not achieve an LO). Teachers also complete on-going formative assessment- uploading their reflective judgement on the formative section on EAZMag.

At the start of the year, year 3 children, who are new to the school, complete a baseline NFER assessments. All children also complete these assessments at the end of the year.

### SEND

TA support is predominantly provided to the classes who are working significantly below ARE- this allows for additional scaffolding and guided groups for those pupils.

The organisation of classes allows for pupils to work at the most suitable pace to them and allows for more time to fill gaps, to allow children to best reach their full potential.

Intervention support is in place for children identified by the SENCo. These interventions include: IDL, Plus1, Power of 2, Shine Maths, Number Stacks.

ILP's for children, where required, have focused personalised Maths targets.

### Times tables learning

In year 3/4 children complete a tackling times tables activity in each lesson. This process involved children completing rapid recall times tables cards, regular mini-tests and adult:pupil assessments.

This process is designed to gradually build up challenge- children work through different stages over two years. Staff also use timestables.co.uk to support times tables learning.

In year 5/6, depending on the needs of the children, they may work on times tables sessions in lesson starters or as part of focus lessons.

All children have access to TTRS, which may be integrated into lessons or set as homework.

### Organisation of classes

Year 3/4 is split into 3 classes: Year 3, Year 4, Below ARE

Year 5/6 is split into 3 classes: Year 5, Year 6, Below ARE

We made the decision to organise classes like this as it allows us to use lesson time more effectively to focus on what children need at the stage of their learning. We also it allows us to work at a suitable pace for all children and also allow children to reach their full potential and to feel like they are succeeding.

It also allows us to focus TA support at below ARE classes for increased adult support. Where possible we also try to make these classes smaller, so that they can have a more personalised teaching approach.

### Vocabulary

Specific vocabulary is made explicit to teachers in the progression document.

For each unit vocabulary is displayed on WW and is directly referred to in lesson.

Teachers promote the use of effective vocabulary during verbal responses and also during reasoning work.

### Values

**Respect:** We promote children to demonstrate respect to each other and their input into lessons. We encourage them to show respect when working collaboratively.

**Resilience:** We provide children with opportunities to complete extension- to provide extra challenge. Children are presented with problem solving tasks- some of which may be extended allowing children to demonstrate resilience.

**Reflection:** We provide children with opportunities for children to write comments on their work to show how they feel about their learning. Children may be asked to self assess using the R,A,G marking method. Children are encouraged when they make mistakes "why" they feel they went wrong.

**Relationships:** In lessons children have frequent opportunities to work with talk partners. Often tasks are designed for children to work collaboratively with a team or partner. Children often support each other to promote learning.

**Responsibility:** Children are required to take responsibility for their own learning- approaching lessons with a focused and hard-working attitude. Children are given homework weekly, which they need to demonstrate responsibility to complete. We ask that children take responsibility in their learning- to express honestly how they feel in their learning.

### Extra Curricular Opp/ Cross curricular learning

We have held a range of Maths events in school. These have included: infant-junior maths day, class maths projects, TTRS events and Primary Maths Challenges.

We have attended the Gifted and Talented Maths events at BCA.

Each year we have a Magical Maths club for pupils- they also run an assembly each year.

Staff are mindful of ways of providing opportunities to integrate Maths in their other lessons. Most predominantly this includes data handling and calculating averages in Science.

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## Implementation – How do we achieve our aims?

### Lesson Structure

#### Start of lesson:

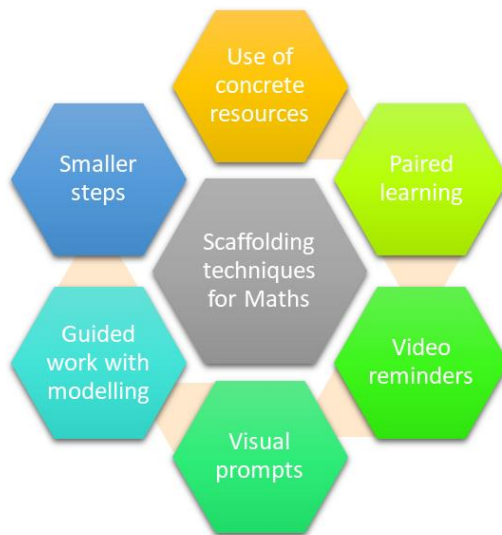
Yr3/4 Tackling times tables activity  
Yr5/6 WRM Flashback



#### Main Lesson:

The structure of your main lesson may vary considerably depending on the objective and the point of which you are in the unit of work- this is flexible and down to teacher judgement.

Where required, ensure that children are support through a range of scaffolding techniques:



#### End of lesson:

Recap on learning- this may be an extension question, an opportunity to demonstrate learning, a vocab task, marking work together, self assessment or children making a comment on their work.

### Unit of learning structure

Pre-Unit assessment

Explore relevant vocab for the unit

Predominantly fluency based sessions

Opportunities for varied fluency

Move towards more opportunities for reasoning and problems solving

End of unit assessment

Address any misconceptions and gaps through guided work

### Enjoyment in Maths

We try to create a variety of maths lessons, to create a sense of excitement in Maths lessons.

At BJA we try to provide opportunities for hands on and active learning approach, including the use of Active Maths.

We set challenges and problem solving opportunities- and where possible make links with current topics.

### Models and Images

The progression document includes a range of models and images that can be used to support learning. We encourage the use of teacher judgement, to consider how and when these models and images are used.

The most common concrete resource we use are: dienes blocks, Cuisenaire rods, bead strings, tens frames and numicon.

The most common images we use are part-part-whole models, bar diagrams and number lines.

### Success

We believe that motivation and enjoyment comes from success. Therefore we focus on explicit teaching, small steps of progression, making links, supportive models and images and guided groups to foster a love for mathematics for all children of all abilities.

### Marking and feedback

Teachers apply the use of BJAs marking policy to provide feedback to pupils. This includes live marking, self and peer marking, pink and green marking and the use of RAG self assessment. We also use verbal feedback as an effective means of feedback and to promote dialogue on addressing misconceptions and next steps in learning.

## Impact – How do we know if we've achieved our aims?

Majority of children make expected or more progress during their time at BJA- Progress measure will demonstrate this.

Children gradually become more confident with four operation and by the end of year 6 majority of children have secure formal methods

Children become respectful, resilient, and reflective learners, who can work as a team and take responsibility for their own learning. Children will be able to verbalise how they demonstrate 5Rs in their Maths work

Evidence of reasoning and problem solving opportunities is visible in teacher planning and in pupil's books.

SEN children and LA pupils make progress in their learning and become more confident mathematicians.

When speaking to pupils, majority express a love on Maths and can verbalise their achievements. They share their Maths work enthusiastically.

An appropriate level of challenge will be visible in pupils book and in teacher planning. When speaking to children they will be able to express what challenges they have overcome.

