



13/11/2022

# Mathematics Statement and Guidance (Y1-6)

Review Date	Version number	Reviewer/Owner (post holder)	Approved by (Committee)	Signature
13/11/23	1	Helen Gerard		
03/10/23	2	Mandy Jacques		

## **Aims and Scope**

Our mathematics curriculum, guided by the "Can Do Maths" Scheme of Work, places a strong emphasis on equipping students with the skills needed to tackle real-world problems. We believe in fostering a strong foundation in mathematics that not only equips our students with essential skills that encourages them to explore real-life contexts but also to discover patterns and foster a love of learning in maths.

Our curriculum is designed to make mathematics engaging, practical, and fun and provides students with the tools they need to tackle problems with confidence.

The scheme of work is built around a child-centred lesson design that models and embeds a growth mindset approach to maths and focuses on helping all children to build a deep understanding of maths concept.

## **Other linked documents**

This policy is designed to be read alongside other school policies including:

- Assessment Policy
- Homework Policy
- Marking and Feedback Policy
- SEND Policy
- Early Years Policy
- More able Policy
- Teaching and Learning Policy
- Presentation Policy
- Curriculum guidance Policy
- EYFS mathematics policy

## **Curriculum Intent:**

We aim for all pupils to:

- Become fluent in the fundamentals of mathematics (see Year by Year Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.

### **Professional development**

- Staff are expected to attend relevant courses during the school year.
- The Maths Team hold termly meetings to discuss updates, assessment, monitoring and CPD.
- The Maths lead/ team deliver regular professional development meetings to update, train or consult with staff.
- Moderation takes place in house, within the TPAT (The Parks Academy Trust) maths team and with other primary schools within the trust and with support from external consultant.
- Staff work closely with the Trust to ensure assessment for transition is accurate.

### **Inclusion**

In Maths teaching at Red Oaks, staff are aware of children's individual needs and how to best differentiate teaching and learning to enable access for all. This is done through quality first teaching to suit a variety of learning styles, often using a multisensory approach. Teachers consider classroom organisation and management strategies to ensure optimal access for all learners, including those with physical, sensory and learning needs. During 'Progress meetings' (3 times a year) the SENDCo, class teachers and Key Stage leads will discuss the impact of interventions on ISI sheets and how best to support the needs to individual children. Teachers have access to LDD and SBI managers for advice on differentiation, target setting and assessment for specific children in their classes.

### **Specific interventions and support in Maths**

- Red Oaks believes in early intervention. This is achieved through baseline assessments, on-going teacher assessment for learning, pre-teaching of key knowledge and strategies, immediate intervention (over-teach) and booster programmes for specific children in line with their Individual Education Plans (IEPs) or with identified groups.
- 'Help yourself' displays must be in every classroom from Y1-Y6. These must include a range of manipulatives, scaffolding resources such as multiplication grids and pictorial aids to support children during lessons. Children must be able to access these independently. At Red Oaks we promote the use of BLP muscles to support children in their learning. By using the 'Help yourself' displays and encouraging children to 'Try three before you see me', we are building resilient and independent learners.

- Where appropriate children may have individual maths packs that will include personalised resources to help them during lessons. These packs will be kept in individual trays and the children should be encouraged to use these.

### **Children in the SBI Provision**

Children in the SBI provision are severely, or in most cases profoundly/totally deaf which means they have extremely limited (if any) access to spoken English. This has a considerable impact on the development of their mathematical vocabulary and the ability to understand multi-step word problems. Although many of the children communicate well in British Sign Language, BSL is a very different language from English in terms of vocabulary and grammatical structure and it has no written form. To assist children in developing their mathematical skills, a number of specialist interventions and strategies are therefore used according to the individual needs of the child, including:

- Additional English interventions with a Teacher of the Deaf to work on mathematical concepts and language;
- IPP/IEP targets relating to mathematics;
- Pre and post teaching.

Teachers with SBI children in their class should talk to a Teacher of the Deaf regarding the development of numeracy and literacy skills in deaf children, task differentiation and strategies to use with deaf pupils, and the specific strengths, difficulties and needs of individual children. For information on assessment procedures, speak to the SBI Manager.

### **Children in the CLAN Provision**

Whilst aspiring to the same rationale and aims as outlined at the start of this policy, pupils in the Forest Class Inclusion Base follow a highly individualised and differentiated curriculum. Due to the wide range of needs and abilities of pupils within the SRP, and as the majority of pupils are working at p-levels, such adaptation to the curriculum is essential. The Inclusion Base Manager attends staff meetings and training where appropriate, to ensure that where mainstream practices and policies are relevant and beneficial, that they can be adapted and incorporated into teaching and learning in the Inclusion Base; for example, Can Do Maths resources from a more appropriate year group, Numicon resources, Times Table Rock Stars and NUMBOTS. Where possible and appropriate, children may take part in maths lessons with their support adult.

**Curriculum Implementation**

<b>Mathematics Lessons: Teach Up</b> <b>M/T/W/T/F (45 minutes)</b>		<b>Maths on Track Meetings: Keep Up</b> <b>M/T/W/T/F (20 minutes)</b>
<i>'Learning Together'</i>	<i>'Support and Challenge'</i>	<b>Deliberate Practice Sessions</b> <b>Arithmetic/Intervention/Practice</b>

**Mathematics Lessons**

Each lesson focuses on a manageable step of new learning based on the National Curriculum statements.

Typical Lesson design:

1. Hook: Introduction with real-life link - this is aimed to engage questioning about the manageable step
2. Teach it: Live modelling of the new learning with explicit use of potential misunderstandings
3. Practise it: All children practise together **Support and Challenge**
4. Do it: Up to 5 examples- 5 'What it is' or 3+2 'What it is/ What it is also'.  
**Procedural Fluency**
5. Secure it: 1 or 2 misunderstandings (True/false, Spot the mistake)  
**Conceptual Understanding**
6. Deepen it: Apply understanding to solve new problems  
**Mathematical Thinking**
7. Higher order thinking challenge – low threshold, high ceiling task
8. Review it: Lesson Recap: key Concept Statement and Key Vocabulary (this may happen at the end of a session or as AfL at the start of the sequential lesson or both as appropriate)

Maths OnTrack (MOT) lessons are complete at a different time of the school day and consist of an opportunity to re-visit learning, practise a key concept that is crucial to progress or to introduce forthcoming learning.

**Multiplication and division facts and number facts**

As part of the weekly commitment to maths, children will have access to the following:

- Times Table Rock Stars and NUMBOTS to enhance their number understanding, recall of number facts and accuracy
- Times Tables races (Y3 & Y4) to monitor progress and assessment
- Counting stick/ step counting (Y2-Y6) daily on times tables daily
- Calculation's practise - 5 minutes daily arithmetic practice as part of the morning work

### **Pre-teaching and Over-teaching**

- 2-minute maths (identified children or all whole class)
- Over-teach based on ongoing formative teacher assessment (marking on the move)- all children (MOT) and identified children in small groups if there are significant gaps in understanding and learning
- Planned interventions- Can Do Bonds, Times Tables Rock Stars, Games for Tables, Can Do Tables and Can Do 21 and Retrieve It quizzes

### **Curriculum Impact**

#### **Assessed through:**

#### **Formative assessment**

- Use of Kahoot or Plickers to assess gaps in learning or misconceptions
- Low Stakes tests end of unit quizzes to collate data on gaps in learning to inform pre-teaching and planning (Google forms)
- End of unit assessments to inform future MOT sessions and interventions (not formal testing)
- Use of Testbase assessment questions as a guide to inform MOT
- KPI data- ongoing teacher assessment to identify gaps in learning and also inform the transition into the next academic year
- TTRS (Times Table Rock Stars) heatmap to see areas of development for times tables

#### **Summative assessment**

- Written and timed assessments in Terms 2, 4 and 6

## 1. Appendices

### 3.1 Can Do Maths resources

Link to document(s)
<a href="O:\MATHS TEAM\ 2023 24\Can do">O:\MATHS TEAM\ 2023 24\Can do</a>
<ul style="list-style-type: none"><li>• Can Do Bonds and Tables</li><li>• KPIs overview</li><li>• Low Stakes End of Unit Quizzes</li><li>• Remember Its</li><li>• Whole Year Road Maps</li><li>• Y2-6 KeePuppl KPI workouts</li><li>• Y1-6 Ready to Progress tests</li><li>• Y1-6 Retrieve It Quizzes</li><li>• Y1-6 Arithmekits</li><li>• Solve it SATs questions</li><li>• LTP</li><li>• Y1-6 Knowledge Organisers</li><li>• Step counting</li></ul>

### 3.2 Maths lesson, planning and assessment guidance

<O:\MATHS TEAM\ 2023 24\Documents\Maths at Red Oaks guidance updated SEPT 23.docx>

### 3.3 EYFS policy

<O:\MATHS TEAM\ 2023 24\Documents\Maths EYFS policy October 2023.docx>

### 3.4 Example teaching presentation

<O:\MATHS TEAM\ 2023 24\Can do\Maths lesson format example - Year 4.pptx>

### 3.5 Example working wall

