

## INTENT



### Maths at St Joseph the Worker Catholic Primary School

#### Subject Lead – Miss Bradshaw

Every day is a maths day. Children at our school participate in a maths lesson / mathematical activity EVERY DAY.

We believe maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. As a school, we aim to inspire a real love for maths.

In line with the national curriculum for mathematics, our aims are to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At St Joseph the Worker we believe in deepening understanding not accelerated teaching. We focus on depth rather than breadth and we believe that pupils who grasp concepts rapidly should be challenged through being offered reasoning and problem solving activities 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.

#### Planning

##### EYFS:

We follow the National Curriculum programmes of study. Our Nursery teachers continue to use the 'Development Matters' document, as do Reception alongside the White Rose plans to support their delivery of the National Curriculum: laying foundations in mathematics.

##### Y1-Y6:

We follow the National Curriculum programmes of study. We use White Rose as a basis for our planning, to enable us to deliver the National Curriculum programmes of study to fulfil our focus on further developing our children’s reasoning and problem solving skills.

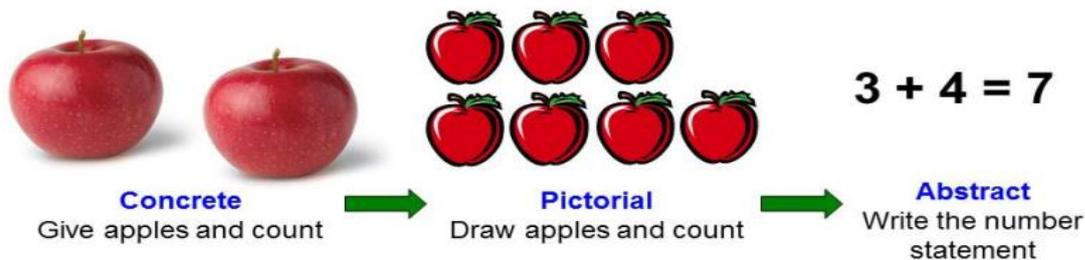
Plans are to be annotated (not just dated) with how the objective will be taught, what resources are being used, groupings (if any) and apparatus being used or available to the children. The children decide when/ when not to use them.

In line with the white rose materials, all children should have access to the same objectives and differentiation will be through support and/or the use of concrete materials.

CPA Approach	
Stage	Characteristics
Concrete	Refers to the use of manipulatives, measuring tools or objects that the student handles.
Pictorial	Refers to the use of drawings, diagrams, charts or graphs that the student draws
Abstract	Refers to abstract representations such as numbers and letters that the student writes

Example:

Tom had 3 apples. His mother gave him 4 more apples. How many apples did he have altogether?



### Assessment

- Y2 and Y6 use the previous years published Maths Papers as a baseline, practise tests throughout the year (NFER and previous years SATs paper) statutory SATs tests in the Summer Term.
- Y1, Y3, Y4 and Y5 use NFER tests as a baseline in Autumn term – repeat in Spring followed by NFER Summer tests.
- All children will be assessment against KPIs (basic skills/sticky knowledge) and tracked throughout school.
- Weekly arithmetic or half arithmetic tests will be used weekly and this information will be tracked.

### Interventions:

Interventions are planned for any children making slow progress or not achieving their full potential. The impact of these is measured by class teachers and discussed during pupil progress meetings.

Interventions include ‘keep up’ and ‘catch up’ sessions.

## **Roles and responsibilities:**

### ***Head Teacher and Governing Body***

- supports the use of appropriate teaching strategies by allocating resources effectively
- monitor the effectiveness of teaching and learning strategies in terms of raising pupil attainment
- ensure staff development and performance management policies promote good quality teaching

### ***Subject Leader***

- manages the subject through monitoring and support to ensure the correct implementation of the National Curriculum for Mathematics is being delivered
- ensures a regular and effective programme of analysis of children's work and short term planning (as appropriate) is in place
- takes responsibility for the purchasing and organisation of resources
- keeps up to date with developments in mathematical education and disseminate information to colleagues through INSET days and staff development meetings

### ***Class Teachers***

- have high expectations of all children
- ensure the effective implementation of the Statutory National Curriculum for Mathematics
- provide opportunities for all children to develop fluency, reasoning and problem solving
- ensure learning is differentiated to enable all children to reach their full potential
- make effective use of assessment for learning within mathematics
- committed to raising standards for all children

### ***Parents/Carers***

- are encouraged to assist their children with the regular homework given (see Homework Policy)
- are asked to encourage their child to attend after school Mathematics clubs on offer
- are asked to encourage children to use 'Mathletics' at home

## **COVID 19**

In these unprecedented times our expectations in maths are extremely high. We aim to work in partnership with parents to ensure any periods of school closure / bubble closure or pupil isolation runs as smoothly as possible. We will provide Maths home learning via White Rose teaching links @ <https://whiterosemaths.com/homelearning/> and the children's work books will be sent home for completion of set tasks. Each class teacher will update home learning requirements weekly on our school website. Regular communication will be made with home and school and we will work hard to support pupils during home learning.

Reviewed – September 2020

S. Bradshaw (subject leader)