# Westerings Primary Academy

# Subject Policy Document

*'To inspire our inquisitive children to be creative, determined and resilient whilst embracing and enabling their individual ambitions.'*

**Subject Name: Mathematics**
**Academic year - 2022 to 2023**
**Date updated: November 2022**
**Date to be reviewed: November 2023**

***Subject Specific Intent Statement:*** To enable our children to experience the beauty, power and creativity of mathematics, whilst developing their sense of curiosity about the subject and a determination to master the understanding and knowledge required to realise their full potential.

## 1. Aims and Objectives

| What is the rationale for your subject specific intent statement? *(Make reference to links to the whole school intent statement)* |
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| The intent statement for mathematics reflects the fact that achievement in this subject will impact on all children's futures, affecting their ability to follow further educational and career pathways. However, the statement also recognises the fascination mathematics can evoke and its importance in the wider world. Success in mathematics demands a determination and resilience like no other subject – key qualities highlighted as important in the whole school intent statement. |

| What are the National Curriculum Statements for EYFS, KS1 and KS2 for your subject? *(use hyperlinks)* |
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| Early Years:<br>Early Learning Goals<br>Development Matters<br><br>KS1 and KS2 programmes of study for mathematics - National Curriculum<br>Mathematics National Curriculum |

| What are the key areas of your subject? What does this look like in the classroom? *(headings from the subject progression subject)* Are there any key approaches to your subject? *(i.e. use of the mastery flow model)* Why have they been selected? Give a brief outline of their structure. |
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All mathematics is taught following the AET programme of study using the mastery flow model to ensure effective challenge and support. This ensures continuity and progression throughout the school. There is a dedicated Mathematics lesson every day lasting 60 minutes in KS2 and a minimum of 45 minutes in KS1. There is also extra time allocated in each class's timetable to focus on arithmetical progress. The teaching of times tables is taught following the academy's guidance (determined by the maths subject leader).

## 2. Subject organisation

How is your subject led? Who is accountable? How and when are reviews made? What impact will this have?

Claire Gaya has overall responsibility for the teaching and learning of mathematics across the academy. Hilary Coker is part of the maths team and takes responsibility for the teaching of arithmetic including times tables.

The Principal & Senior Leadership Team are responsible for -

- ensuring there is a shared vision for mathematics within the school
- ensuring consistent implementation of the Mathematics Policy
- ensuring statutory targets in mathematics are met

The Mathematics Subject Leader is responsible for -

- The day-to-day implementation of the Mathematics Policy as well as the implementation of the mathematics scheme of work to ensure progress and achievement
- Reviewing the Mathematics Policy as required
- Auditing mathematics in the school and producing an annual action plan to improve the teaching and learning of mathematics
- Monitoring which includes classroom observations, scrutiny of work and planning, discussions with pupils, curriculum reviews, subject climate walks, questionnaires and staff discussion which will inform actions needed to improve the teaching of maths across the academy
- Analysing data and monitoring achievement and attainment throughout the Academy, assisting colleagues with setting up interventions where necessary
- Leading staff training via Staff Meetings and INSET so staff can update skills and knowledge and so they can develop their confidence in teaching maths
- Recommending the purchase and allocation of resources depending on budget priorities

How should your subject be taught? What should staff use to plan and ensure progression? *(Use hyperlinks to progression document / scheme of work)*

Key documents:

AET mathematics scheme of work
Teaching of Multiplication Tables at Westerings Primary Academy

Teachers are responsible for -

- Planning of lessons using the Academy agreed approach, i.e. long term planning and medium term planning as per the AET guidance, and weekly planning linked to assessments of children's previous learning completed on the agreed format

- Using the mastery flow model appropriately, ensuring that all children have equal access and opportunities to challenge themselves and further their learning in maths
- Adhering to the Academy's agreed approach of mathematics teaching and learning, including adherence to the guidelines set out in 'The Teaching of Multiplication Tables'
- Assessing pupils' knowledge and understanding on a daily basis and long term then using this to further pupils' learning
- Meeting the statutory requirements of the curriculum
- Fostering an enjoyment of mathematics and a clear understanding of its relevance and importance in everyday life

Assessments

Class teachers assess pupils' knowledge and understanding on a daily basis. Continual assessment is seen as an integral part of the teaching and learning process, and children are encouraged to participate in this through self and peer-assessment. Children self-assess after each lesson using traffic lights and throughout each unit using the objectives provided on the medium term planning format. By using these objectives as targets for each unit, children are able to understand their next steps and be fully involved in the target setting process. Marking and feedback of maths is evaluative to aid this process.

National curriculum objective statements are used to secure judgements in achievement and PTM online tests at the end of each year are used as summative indicators of secure knowledge and application of skills. Progress towards meeting these objectives is updated on target tracker termly although this should ideally be a continual process.

Arithmetic tests are also used each half term in years 2 to 6 to monitor children's progress in arithmetic skills. Teachers are expected to use information from these tests to inform the content of their extra arithmetic skills teaching sessions and interventions.

## 3. Cross Curricular Links

Which subjects are linked to yours and how? What should staff use to plan and ensure progression?
*(Consider key skills and how they overlap. Discuss how high quality provision in both subjects will support learning in both subjects. For example: How Art planning and evaluation skills link to the same skills in D&T. How computing debugging skills mirror the evaluation skills in science investigative work. Please ensure links to core subjects are carefully considered.)*

Mathematics as a tool is essential in the pursuit and understanding of all other subjects (e.g. analysis and representation of data, measuring, estimation, patterns, shape, position and movement). Mathematic skills should therefore be considered and seen woven through the teaching of the rest of the curriculum.

How is your subject linked to SMSC? How is your subject linked to British Values?
*(SMSC Guidance)* *(British Values Guidance)*

Social: Mathematics supports children's social development by promoting self-esteem and building self-confidence. Maths lessons encourage collaborative learning through listening and learning from each other during paired, group and class discussions.

Moral: Mathematics supports children's moral development through discussion about mathematical understanding and challenging assumptions. It helps children to understand and use logical arguments and discourages them from jumping to conclusions when trying to determine the truth.

Spiritual: Mathematics supports children's spiritual development by helping them to develop deep thinking

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| and questioning the world around them. They gain an appreciation of the richness and power of mathematics in our everyday lives.<br><br>Cultural: Mathematics supports children's cultural development by developing an appreciation that mathematics, its language and symbols have developed from many different cultures, and acts as a universal language across the whole world. |

## 4. Resources

| How and why have resources been selected? How should they be used in class? Where can they be found? *(Please include a hyperlink to your resources register)* How do they link to current topics? *(Consider placing this on your resources register to save you time explaining it here.)* |
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| Each classroom should contain or have access to a range of mathematical equipment needed for the everyday teaching of this subject. There is also a centrally stored equipment area for shared resources. |

| How and when are resources reviewed? By whom? What should staff do if they need new/different resources? |
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| Requirement for resources is constantly reviewed by the maths subject leader. Any staff who feel that new resources are needed to inform the maths subject leader. |

## 5. Inclusion and Differentiation

| How are pupils supported and challenged in your specific subject? *(Describe any methods of differentiation unique to your subject i.e. using dictation feature on chromebooks etc)* |
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| Effective use of the mastery flow model ensures that children who require it are given extra time to practise and consolidate their fluency in mathematical skills whilst more confident children have the opportunity to move through rich and challenging activities. This approach follows the guidance from the National Curriculum which states that children should move through the programmes of study at broadly the same pace. Adaptive teaching is used to ensure all pupils can access the learning whilst some are further extended. When children are significantly below expectations, teachers may need to consider teaching content from previous year group's programmes of study. |

| How are the most able pupils extended so their learning can be deepened in your subject? *(AMA challenge days etc.)* |
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| AET inter-school maths competitions |

## 6. Role of the Subject Leader

See the **Subject Leader Toolkit**

7. **Parent/ Local community engagement**

| How is your subject represented in any home learning tasks? |
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| Maths homework is set using Doodle and alternates weekly with English. |

| How are resources, knowledge, skills, guidance and provision available due to our place in the Academy Enterprise Trust utilised? How does your subject link to the AET values? *(Be unusually brave. Discover what's possible. Push the limits. Be big hearted.)* |
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| Mathematics is taught and assessed using the AET's resources. The maths subject leader works collaboratively with the AET maths advisors to ensure these resources are used effectively. |

## Appendices/Hyperlinks: