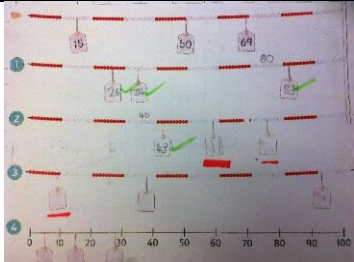




## Mathematics at Ormiston Meadows

Planning	Outcome	Expectation/Evidence	How to use it?
<p><b>Medium Term Plans</b></p>	<p>All objectives will be covered in every year group.</p> <p>Teachers will have sufficient time to teach objectives to a mastery level.</p>	<p>Teachers will use the Medium Term Plans to know how long each unit will last – if more or less time is needed for each unit, teachers will use their judgement to move at a pace suitable to class.</p> <p>Teachers may follow the White Rose</p> <p>National curriculum objectives are explicitly stated.</p>	<ul style="list-style-type: none"> <li>All objectives must be taught in each unit.</li> <li>Time stated for each unit isn't strict – it should be taught until you feel each child has reached appropriate levels in learning.</li> <li>Teachers can use White Rose to support their planning.</li> <li>The school calculation policy must be used in teaching any calculation units.</li> </ul>
<p><b>Calculation Policy</b></p>	<p>Staff have a clear idea of the progression of teaching the four operations.</p> <p>Pupils are taught using the concrete, pictorial and abstract representations, ensuring they have a deep understanding of the underlying mathematical concepts.</p> <p>Models how to use resources for staff</p> <p>Is a progression rather than a yearly doc so staff can identify which skill is a gap.....</p>	<p>Teachers will use the concrete-pictorial approach to ensure pupils have a deep understanding, proficiency of strategies and move towards mastering content.</p> <p>Teachers will use the calculation policy when planning to see the appropriate breakdown of each skill.</p> <p>Representations will be captured and shown on the Maths working wall during the topic – children can refer to it at any time to support thinking</p> <ul style="list-style-type: none"> <li>Work with concrete resources will be captured as photographs and stuck in books – pupils may write an annotation</li> <li>Book looks will demonstrate if appropriate strategies have been used by children</li> </ul>	  



## Mathematics at Ormiston Meadows

<b>Short term Planning</b>	<p>All staff will have a weekly plan with core objectives from the Medium Term Plan's covered.</p> <p>All pupils will make progress in each lesson.</p>	<p>Staff will use their own lesson plan format or plan using power points.</p> <p>These will always include key objectives being covered that week and any other detail that the teacher feels they need to teach effectively.</p> <p>Teachers may want to include a cold task at the beginning of a unit to assess starting points.</p> <p>Hot tasks may be used at the end of unit to assess all pupil's depth of understanding of the objectives taught.</p>	
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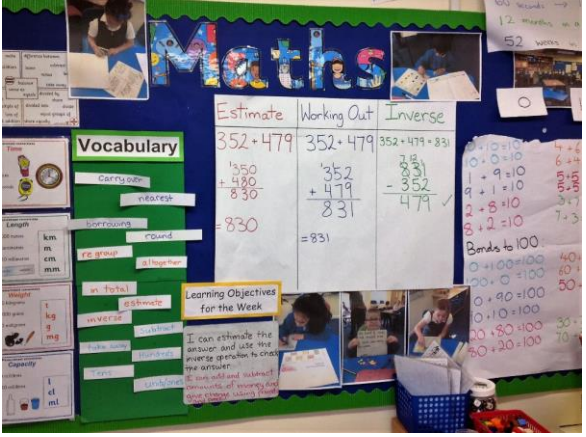
## Mathematics at Ormiston Meadows

Planning	Outcome	Expectation/Evidence	Possible ideas
<p><b>Maths Meetings</b></p>	<p>Children will develop fluency and pace at recalling key Mathematical facts.</p> <p>Children will hear, share and use improved Mathematical vocabulary.</p> <p>As topics are covered in a Mastery Curriculum, key concepts will be revisited <b>constantly to embed and ensure Mastery.</b></p>	<p>A 15 minute daily session requiring fast pace.</p> <p>They should involve active approaches (dance, songs, actions, maths stories, pictures, chants, real life contexts).</p> <p>They should be taught as a whole class - differentiated through questioning.</p> <p>Questions should be asked using a hands down approach.</p> <p>Adults should model reasoning and children are to answer in full sentences (modelled by adults constantly).</p> <p>Classroom maths working wall could have a small section for a certain picture, song, times table etc linked to sessions that week.</p> <p>There should be slides devoted to partner talk.</p> <p>For 4 days there should be up to 10 slides covering different skills (1 slide will be for times tables/skip counting practice). Day 5 should be pure times table practice – Times table rockstars and tests (paper tests are on times table rockstars site)</p> <p>These sessions are not planned on paper – key questions may be recorded as notes on slides.</p> <p>Only verbal responses are required in sessions there should not be evidence in books.</p> <p>These sessions may be observed.</p>	<ul style="list-style-type: none"> <li>• Staff can use pre-prepared 10 slide PPT just thinking of different songs, actions, chants to share</li> <li>• Staff can adapt the PPT</li> <li>• TAs to take notes of pupil comments for assessment</li> <li>• These could be put on speech bubbles and placed on working wall</li> <li>• Pictures – what Maths can you see?</li> <li>• Pre-teaching/learning (i.e. Maths story could be shared in each session the week before starting a new topic)</li> </ul>

## Mathematics at Ormiston Meadows

<p><b>Key facts/ Times tables</b></p>	<p>All pupils will know all times tables fact up to 12 x 12 by the end of Year 4.</p> <p>All pupils will have weekly times tables practice.</p>	<p>Various strategies used to teach key times tables facts (songs, games, chanting etc).</p> <p>1 slide will cover times tables facts in each daily maths meeting.</p> <p>The 5<sup>th</sup> maths meeting each week will be pure times tables practice using time tables Rockstars tests.</p> <p>Times tables will be sent home to learn each week as part of homework – Each child will have online access to times tables rock star.</p>	<ul style="list-style-type: none"> <li>• There should be times table focus on one slide during each maths meeting session.</li> <li>• A whole 15 minute maths meeting should focus on times tables each week.</li> <li>• Times tables facts should be displayed in every classroom or area that is used for maths.</li> <li>• Children need to be given times tables facts to learn for homework.</li> </ul>
<p><b>Daily lesson</b></p>	<p>Each class will have a daily maths lesson lasting at least 75 minutes (including at least 15 mins for maths meeting).</p> <p>Throughout the year daily maths lessons will cover all national curriculum objectives.</p> <p>Daily lessons will be planned following the medium term planning documents.</p>	<p>Share learning objective and success criteria for the lesson and how it links to previous learning. This will also be stuck in each child's book.</p> <p>Specific concrete, abstract and pictorial representations are used to teach and model teaching calculations (as seen in calculation policy).</p> <p>Pupils will have access to resources (bead strings, place value counters, Deans etc) throughout each lesson if needed.</p> <p>AFL will take place in lessons to ensure all pupils are making progress.</p> <p>All pupils will be given opportunities for mastery.</p> <p>Adults will work with guided groups throughout a lesson and will give pupils verbal feedback.</p> <p>There will be challenge and high expectations for all learners in every lesson.</p> <p>Questioning will be used throughout lessons.</p>	<ul style="list-style-type: none"> <li>• All lessons should be prepared and planned for in advance.</li> <li>• Objectives and lesson plans/resources should be shared with any other adults that work in the classroom, giving them enough time to prepare.</li> <li>• Daily lessons should take into account learning from each child the previous session. Changes to future days planning can be hand written onto lesson plans.</li> <li>• Children should show progression during each daily session.</li> <li>• All adults working with guided groups should be making notes of each child's learning that session.</li> <li>• Learning can be recorded as written calculations in books, photographs or orally and/or using whiteboards if working as part of a guided group.</li> </ul>

## Mathematics at Ormiston Meadows

<p><b>Environment and Resources</b></p>	<p>There should be a maths working wall in every classroom.</p> <p>Maths resources should be accessible to all pupils in the class maths trolley.</p> <p>Whole school maths resources should be stored in the maths area.</p>	<p>Every classroom will have a maths working wall which will include:</p> <ul style="list-style-type: none"> <li>• Key objectives for the unit of work</li> <li>• Key vocabulary for the unit of work</li> <li>• Examples of concrete, pictorial and abstract images.</li> <li>• Area linked to maths meeting learning.</li> <li>• Examples fluency and variation (calculation policy)</li> </ul> <p>Every classroom will have a maths trolley of resources to support concrete and pictorial representations.</p> <p>Examples of maths will be seen in Science and other non-core subject displays.</p>	<p>Example working wall:</p>  
<p><b>Homework</b></p>	<p>Weekly homework will be given to all pupils.</p>	<p>All pupils will be set homework on a Friday to be returned by the following Wednesday.</p> <p>Homework will be linked to the learning that week.</p> <p>Appropriate homework can be chosen by the class teacher.</p> <p>Time tables will be sent home to be learnt weekly.</p>	<ul style="list-style-type: none"> <li>• Teachers to ensure all pupils have a login and are given their login details at the beginning of the year for TT Rockstars.</li> <li>• Homework set weekly related to learning in class.</li> </ul>

## Mathematics at Ormiston Meadows

<p><b>Marking</b></p>	<p>All pupils work will be marked regularly.</p> <p>Marking will give advice and feedback and move learning forward.</p> <p>All work and marking</p>	<p>Pupils work will be marked according to the Academy feedback and assessment policy.</p> <p>The level of work completed that lesson will be marked on the learning objective slip in the pupil book.</p> <p>Every child will have a feedback question/next steps to respond to during the plenary.</p> <p>Each child will have their book marked in depth once a week.</p> <p>Children will self-assess the learning from the lesson.</p>	<p>For those secure in meeting an objective, our developmental marking can deepen learning by developing the following skills:</p> <p><i>Explanation: the ability to create and share meaning.</i>            Can you explain how to ...convert a decimal to a fraction...?            Can you explain how to... find ten more...?            Is <math>50 + 30</math> equal to 80 (give example)? Explain why.            Is <math>3/5</math> larger than <math>4/10</math>? Can you explain why?</p> <p><i>Classification: the ability to analyse and codify.</i>            Can you organise these...?            How many ways can you find to...?            What is the same?            What is different?            Can you group these...in some way? Why did you group them like that?            What comes next...? Why?            Here is the question and the answer....can you show me how to work this out?</p> <p><i>Exemplification: the capacity to describe, model and illustrate.</i>            Can you draw a picture to represent this?            Can you show me why?            Can you show me how to...?</p> <p><i>Transfer: the ability to see and make connection between topics and themes.</i>            What strategy did you already know that helped you?            Why did it help?            Why did you choose that strategy?            Can you think of another way to solve this?</p> <p><i>Justification: a tendency to ask 'why?' 'how?' and 'what if?' questions.</i>            Why...            How do you know?            What if I tried to...?            What would happen if ...?</p>
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## Mathematics at Ormiston Meadows

			<p><i>Comparison: the ability to contrast and identify common characteristics.</i> Show two (or more) numbers, shapes, questions, pictures, methods, problems, examples, etc and then ask one of the following: What is the same, what is different? Can you sort these...? Have you find all the possibilities...? Have you found all possible solutions? How do you know?</p> <p><i>Generalisation: the ability to formulate hypotheses and patterns.</i> What pattern do you notice? Convince me Have you found all the possibilities? Convince me What if...?</p> <p><i>Action: the ability to translate theory into practice.</i> Providing some form of reasoning or problem that provides varied practice to deepen learning</p> <p><i>Meta cognition: self-awareness and self-direction</i> Why did you change your mind...? Why did you start with that method and then change to that one...? Did you find the best solution? Why do you think that? Could you have chosen a different strategy?</p>
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