

Appendices [Differentiation Policy]:

Further information:

Learning Processes:

Children enter school at different stages of development. They learn in different ways and at different rates of progress. In the course of learning children develop their skills through a variety of processes. These include:

- Investigation
- Experimentation
- Listening
- Observation
- Talking and discussion
- Asking questions
- Practical exploration and role play
- Retrieving information
- Imagining
- Repetition
- Problem-solving
- Making choices and decision-making

Planning:

Planning will be with reference to the National Curriculum 2014 or Development Matters in the EYFS.

The long-term framework will be reviewed annually to reflect any changes in class composition or changes in the National Curriculum.

Medium term planning will be stored electronically in 'staff only' on the server.

The agreed Weekly Planning documents will be available for teachers. They are intended to be useful working documents, not normally handed in for monitoring purposes.

Teachers and support staff will meet termly with the SENCO to plan the interventions for children on the SEN register.

Differentiation:

Teachers will differentiate the curriculum by:

- Task
- Learning
- Outcome
- Teacher / adult support
- Daily challenge/ extension task

Differentiated tasks will be detailed in weekly planning. Learning objectives and Success Criteria will be specified for all differentiated teaching.

Teaching Styles and Strategies

Whole class teaching where:-

- Pupils are involved and are interacting.
- Teacher language is understood by all.

- Predominantly open-ended questioning moves pupils on in their thinking (questions may need to be differentiated to ensure involvement by all).
- Pupils feel confident and able to ask questions.
- Teachers allow an extended response time from pupils.
- Teaching strategies match pupils' preferred learning styles.
- There is a balance between teacher dialogue and the oral contributions of pupils.

Collaborative group work where:-

- There is a balance of opportunity for work in groups according to friendship, ability, gender, group size etc.
- Pupils are grouped appropriate to the task e.g. ability, mixed ability, friendship, prior knowledge.
- Group size has been considered.
- The task is a group task.
- Pupils are clear about the learning objectives and the success criteria.
- Teacher and additional adult roles have been identified and shared with the pupils.
- Pupils are encouraged to exercise and develop social skills.

Other teaching strategies such as:-

- Paired/individual work.
- Peer tutoring.
- Practical demonstrations.
- Outside visitors
- Use of ICT and other media.
- Opportunities for pupils to make independent choices.

QUESTIONS

	One answer	Many answers
From source	Knowing Who killed Tybalt?	Understanding Who was responsible for Tybalt's death?
Not from source	Beyond question How many deaths were there in WS plays?	Big question Is killing always wrong?

Learning must be exciting & engaging.

- Learning is the consequence of thinking... therefore our job is to get pupils thinking
- Language is central to thinking... therefore our job is to get pupils to talk
- Learning is an active process... therefore our job is to get pupils doing

What are pupils required to do with the information they encounter in the classroom?

Classroom practice has to be effective.

Learning is the product of thinking.

What do/ could you ask pupils to do with information in order to make them think?

Core principles -

reduce	sequence
change	assemble
replace	classify
add	compare
arrange	connect

PLUS -

enlarge	simplify	exaggerate	collect	prioritise
share	reconcile			

e.g. arrange = pupils are required to arrange information.

Our job is not to give pupils **our knowing** but to develop **their understanding**.

Make transition from **knowing** to **understanding** and moving to a **deeper form of learning...**

Explaining something in your own words

Giving new examples

Applying new knowledge or skills to different situations

Justify something by offering evidence

Comparing and contrasting

Contextualising the knowledge

Creating a metaphor

QUESTIONS

Impact of good questions - good questions will take learning forward better

Plan for better questions

- Who is the most important character in Cinderella? [reduce question]
- What might have happened if Piggy hadn't worn glasses? [Lord of the Flies]
[change question]
- Which melts quickest - a snowman or a snowman wearing an overcoat? [reduce question]
- Explain to me what I mean by the phrase *rationalise the denominator* without using the word rationalise or denominator? [replace question]
- What are the similarities/ differences between the past tense in German and English? [compare question]
- Defence in basketball: is it more like spaghetti, chocolate, broccoli or custard?
[connect question]

Reduction:

[Tasks require pupils to reduce information and are challenged to think; task could require pupils to rank in order, summarise or prioritise - requires significant decisions.]

- Summarise in 100 words...
- Rank order the following statements...
- Which event was the key turning point in... Second World War/ Cinderella/ the discovery of the structure of DNA?
- Which is the most important sentence/ paragraph/ chapter?
- Who is the most important character in the story?
- What is the most important section of the diagram?
- Underline the six key words.

LEARNING

How do I make this interesting?

How do I enthuse pupils?

How do I make this memorable?

How do I make them think?

How do I get pupils talking?

How do I help pupils get it?

WHAT AM I ASKING PUPILS TO DO TO/ WITH INFORMATION?

Option A - read page 7 OR Option B Have a look at page 7 and tell me which you think is the most important sentence.

[pupils are simply receiving information in option A; however, in option B they have to do something to it]

SANDWICH TECHNIQUE

Step 1 - begin the lesson with a question or activity

Step 2 - continue the lesson with activities, discussion & so on

Step 3 - end the lesson with the same question/ activity you started with

[the difference in pupils answers/ responses from the beginning to the end is an indication of how their understanding has developed & how much progress they have made]

New learning - teacher helps pupils develop understanding

The teacher can teach something - explain, show, model and so on - & then let pupils have a go

The teacher can allow the pupils to have a go - explore, manipulate, speculate, infer - & then help them draw & consolidate their learning

* Pupils can find things out by themselves.

Introduce pupils to new learning -

"Who was responsible for the death of Sir Thomas Moore?" - pupils have no prior knowledge before the lesson - pupils explore the issue - pupils assemble & arrange information - deeper learning & understanding & knowledge.

Lower order	Higher order
<p>1. Recall / Knowledge <i>Asking pupils to remember information they have previously learned, e.g.</i> "Who was...?" "What is...?" "Where is...?" "When is ...?" "Can you list three...?" "How would you describe...?"</p>	<p>4. Analysis <i>Asking pupils to break down subject matter into its parts, study the nature of its parts and their relationships one with another, e.g.</i> "What evidence can you find ...?" "What are the features of...?" "What information will you need...?" "What might this mean?" "What conclusions can you draw?"</p>
<p>2. Comprehension <i>Asking pupils to express ideas in their own words or to interpret major elements in texts to make them more accessible, e.g.</i> "What do we mean by...?" "Can you explain what is happening?" "Can you think of...?" "What can you say about...?" "Which is the best answer?"</p>	<p>5. Synthesis <i>Asking pupils to build a new idea, or theory, plan, experiment or forecast using sophisticated thinking, e.g.</i> "Could you design something to...?" "How could we solve...?" "What do think is likely to...?" "How would you test...?" "Suppose you could ...what would you do?"</p>
<p>3. Application <i>Asking the pupils to understand a general principle and to apply it in a new situation e.g.,</i> "How would you use...?" "What other examples can you find to...?" "What would happen if...?" "What other way would you plan to...?" "What facts would you select to show...?"</p>	<p>6. Evaluation <i>Asking pupils to assess or judge, e.g.</i> "What do you think about...?" "How effective was that...?" "Can you say which is better and why...?" "How would you prove / disprove...?" "What is your opinion of...?" "Why did they (the character) choose to....?"</p>

[Appendix One: Rainbow Continuum for support]

Higher order gets pupils thinking!

'Knowing' questions or 'many answer' questions - difference between knowing & understanding.

Red	Blue
teaching	<u>learning</u>
monitoring	self-evaluation
feedback	<u>dialogue</u>
training	coaching

Don't think red or blue - think PURPLE!

Mastery curriculum

Occasional specific references are made to problem solving within the content list, but all pupils should be solving problems in all areas of mathematics, not just in these restricted instances.

Aims of NC

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.

The development of reasoning is generally the weakest of the three aims in current teaching of mathematics.

The aims of the NC (fluency including conceptual understanding, reasoning mathematically and problem solving) are very important and should be integral to teaching. When developed effectively, they are key characteristics of good and outstanding practice.

Teaching that focuses heavily on covering the listed content, such as calculation, fractions, solving equations, geometric properties of shapes, without developing understanding, reasoning and problem solving at the same time is missing the strong drive that the aims represent for improving pupils' mathematical education. Such teaching is likely to require improvement.

An expectation that all pupils can and will achieve.

The large majority of pupils progress through the curriculum content at the same pace. Differentiation emphasises deep knowledge and individual support/intervention.

Teaching is underpinned by methodical curriculum design, with units of work that focus in depth on key topics. Lessons and resources are crafted carefully to foster deep conceptual and procedural knowledge.

Practice and consolidation play a central role. Well-designed variation builds fluency and understanding of underlying mathematical concepts in tandem. Teachers use precise questioning to check conceptual and procedural knowledge. They assess in lessons to identify who requires intervention so that all pupils keep up.

A mastery curriculum often involves whole-class teaching, with all pupils being taught the same concepts at the same time. Small-group work typically involves challenge through greater depth for the more able and support with grasping concepts and methods for less-able pupils.

'Variation' in exercises set is also known as 'intelligent practice'. Such exercises usually concentrate on the same topic/method/concept but vary in how the questions are presented, often in ways that expose the key underlying concept or mathematical structure, and make pupils think deeply for themselves.

The NC states:

- The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace.
- However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.
- Note: if schools teach the programmes of study as written, pupils are likely to have gaps in their pre-requisite knowledge. The best practice has been schools that have identified such gaps and taken them into account in planning and teaching.
-

What evidence might reflect this expectation for instance in lesson planning, teaching and learning?

- Whole classes taught together, possibly for the whole lesson, on the same concept/method/knowledge.
- The 'pace' may appear to be slow but that could mask development of deep understanding. Key points might be stressed very strongly and repeatedly by teachers.
- Differentiation may not be as overt as previously. For instance, some pupils could receive more adult support or spend longer using practical apparatus in order to grasp the concept or the method being taught. Higher attainers could move relatively quickly to more formal recording or more abstract ideas, or tackle more complex problems or exercises.
- Intervention - within and outside of lessons - is likely to be focused on ensuring pupils are helped to keep up by revisiting concepts or essential prior learning, plugging gaps, or providing additional consolidation.

- Medium-term plans might show longer being spent on each topic to enable greater depth.
- The way able pupils should be challenged (and learning deepened) through more complex problem solving rather than accelerated through new material is a key feature of this curriculum, and is a large shift away from well-established practice under the previous NC.
- At this stage, teachers may be finding it difficult to find suitable problems and activities for the more able.
- Beware questions/problems involving harder numbers being given to more-able pupils - the increase in challenge should come from thinking harder about the concept or topic being taught.

The NC states:

Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems 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.