

# Maths lessons @Pensans

## Retrieval

What it will look like - To begin each lesson, the teacher will have carefully planned the prior learning to recap, this will assist the children with their new learning.

We will see this as it will be evident on the S-plan

I'm doing this because it will help me with my new learning and keeps it fresh in my working memory.

## Vocabulary

What it will look like - After retrieval, teachers will introduce new vocabulary/vocabulary that children will need to understand during the lesson.

## Direct instruction

What it will look like - Teachers will use a variety of methods to help children achieve the learning outcomes of the lesson. All classes will use 'I do, you do' as a way to rehearse and practice during the direct instruction.

This will look different in every class and may include the use of concrete manipulatives, pictural references etc.

Direct instruction will also be fluid and take place throughout the lesson whilst the teacher is live marking and addressing misconceptions. This maybe on a 121 basis or a mini plenary where the whole class follow the direct instructions again.

We will see this through the carefully planned small steps to learning

I like direct instruction because it is clear and shows new learning.

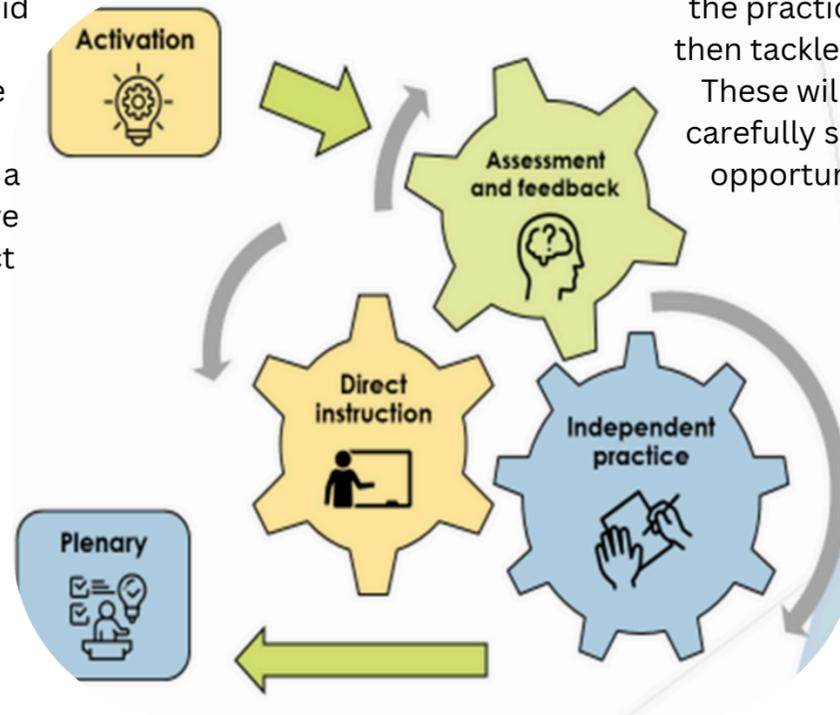
## Independent practice

What it will look like - Children will independently work through well thought out, carefully planned questions that relate to the direct instruction given by the teacher during the input. These questions will vary in style so that children are exposed to a range of question types.

To begin with, the teacher will have planned questions to secure children's understanding which will give them the practice, confidence and skills to then tackle problem solving questions. These will be picked by the teacher carefully so that all children have the opportunity to practice reasoning problems.

When we do independent practice we don't always work alone. We work with our partners to practice the new skills we learnt in the direct instruction from the teacher.

We will see this through the variety of questions from a range of sources



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## Live marking

What it will look like - Teachers and TA's will circulate around the room marking and correcting misconceptions whilst the children are able to then correct.

This allows our teachers to assess learning immediately and use this assessment to create groups for post and pre learning.

It is useful marking and getting feedback from our learning with the teacher in the lesson because I know where I need extra help and to practice again.

We will see this being done in all lessons and adapted teaching from the assessments being made.

## Plenary

What it will look like - This can be done in a variety of ways ranging from a recap of 'what we have learnt' to self assessment. It could be a group problem solving question that is worked out to check understanding. This could also be a chance for assessment on maths.co.uk to see who needs more further teaching.

We will see this on the S plan but it will also be a judgement call from the teacher depending on what they have seen during the lesson.

The final part of the lesson helps me know about the things we have learnt today. We share what we have learnt.

Morning math's challenges and practice happens 4 times a week in every class. This is a mixture of times table practice, arithmetic, problem solving activities and number bonds. This is self led by the students.

Daily arithmetic happens in all classes. This is done separately to the math's lesson itself for 15mins. Each year group does this differently and has different goals which they are working towards. In EYFS and KS1, mastering number is used which allows children to practice and build on knowledge from previous years. In LKS2, the focus is pushed towards the children's ability to recall multiplication facts as well as number bonds to 100. In UKS2, children focus on areas of arithmetic that have been highlighted as weaknesses in the weekly/termly tests.

All classes follow the latest White Rose Scheme of learning for the steps within each topic. Teachers plan their own journeys allowing children to be taught the correct things that fit in best with our curriculum. White Rose is used as a guide to ensure the coverage of the entire math's curriculum.

Alongside following White Rose's coverage, we also have a day away from the scheme. On Friday's, KS1 does a day of shape and measure. LKS2 work on times tables - this is mapped out and delivered in a way that allows children to learn new times tables as well as practice ones they have already learnt. In UKS2, Friday is used for arithmetic practice. Children complete a test (either in pairs or individually) and each question is then worked through step by step by the teacher allowing children to have a constant refresher on these key skills.