

# *Teaching & Learning Guide*

## *EYFS*



**CASTLEWARD  
SPENCER ACADEMY**

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## Aims

Our teaching of maths in EYFS aims to develop a secure base of knowledge and vocabulary, from which mastery of mathematics can be built.

Our EYFS maths curriculum allows children to:

- develop number skills.
- develop an understanding of shape and measure.
- develop spatial reasoning skills.
- improve young children's knowledge and understanding of early mathematical concepts.
- Develop positive attitudes and interests in mathematics.

Our EYFS environment allows children to:

- 'have a go' and practise new skills and concepts.
- make mistakes and develop their learning.
- pursue and develop an interest in mathematics.
- find patterns and relationships and spot connections.
- talk to adults and peers about mathematical concepts.

## Teaching Sequence

### Long term planning

Long term planning is based on guidance contained in the 'Development Matters' document and the requirements of the 'EYFS Statutory Framework'. The structure of the Long Terms Plans is such that two units run concurrently (a number unit and a SSM unit). Each week there should be three number direct teaching slots and two SSM direct teaching slots.

In order to 'interrupt forgetting', key concepts are repeated throughout the year. This ensures that content is revisited as well as ensuring appropriate new content is introduced.

## Medium term planning

In EYFS, medium term plans are taken from White Rose and are saved on the school server. The schemes of work offer advice on learning hours, resources, suggested learning intentions, vocabulary and misconceptions. They also indicate the curriculum statements that are being covered in this unit.

## Short term planning

Teachers plan for maths lessons using the following proforma. This is shared with all practitioners working with the children.

 <b>CASTLEWARD SPENCER ACADEMY</b>		Date: Staff: Mathematical Focus:
CWSA Weekly Maths Plan - EYFS		
EYFS curriculum ELG:	Identified Children:	Key Questions:
EYFS curriculum 40-60 months:	Identified Children:	
EYFS curriculum 30-50 months:	Identified Children:	Vocabulary:
EYFS curriculum SEND:	Identified Children:	

	Learning Intention	Main Teaching- to include deployment of staff	Small Group/Independent Activity	Enhancements to Continuous Provision	Afl
Lesson 1		Resources to be used within the session:	Range 5/6; Range 4/3;	Daily opportunities to apply learning; Resources:	
Lesson 2		Resources to be used within the session:	Range 5/6; Range 4/3;	Daily opportunities to apply learning; Resources:	
Lesson 3		Resources to be used within the session:	Range 5/6; Range 4/3;	Daily opportunities to apply learning; Resources:	

## Vocabulary

Mathematical language is extremely important. In the medium-term plans, the vocabulary for each unit is indicated. During direct teaching, attention should be paid to what mathematical language should be introduced. This language should then be reinforced during learning conversations and through the

environment. Given the evidence on how long it takes to make new vocabulary stick, words should be constantly re-visited.

### Direct Teaching

At CWPA, we recognise that each child will begin the EYFS with unique needs and at varying stages of development. The teaching of maths will therefore begin after a period of baseline assessment, in the Autumn term. Short term planning will then be informed by these baseline assessments and observations.

According to guidance published by the EEF:

***Commonly, the most effective early numeracy approaches include individual and small group work, and balance guided interaction with both direct teaching and child-led activities, depending on the age and capabilities of the child.***

The teaching of early maths at CWSA reflects this guidance and is a balance of daily direct teaching, followed by guided small group work. Individual work and child-led activities will then take place during continuous provision time.

### Maths in the provision

The provision is where pupils will demonstrate what they can do and what they have learnt from the direct teaching. As such, we expect the evidence gathered to be

**N** - natural

**I** - independent

**C** - consistent

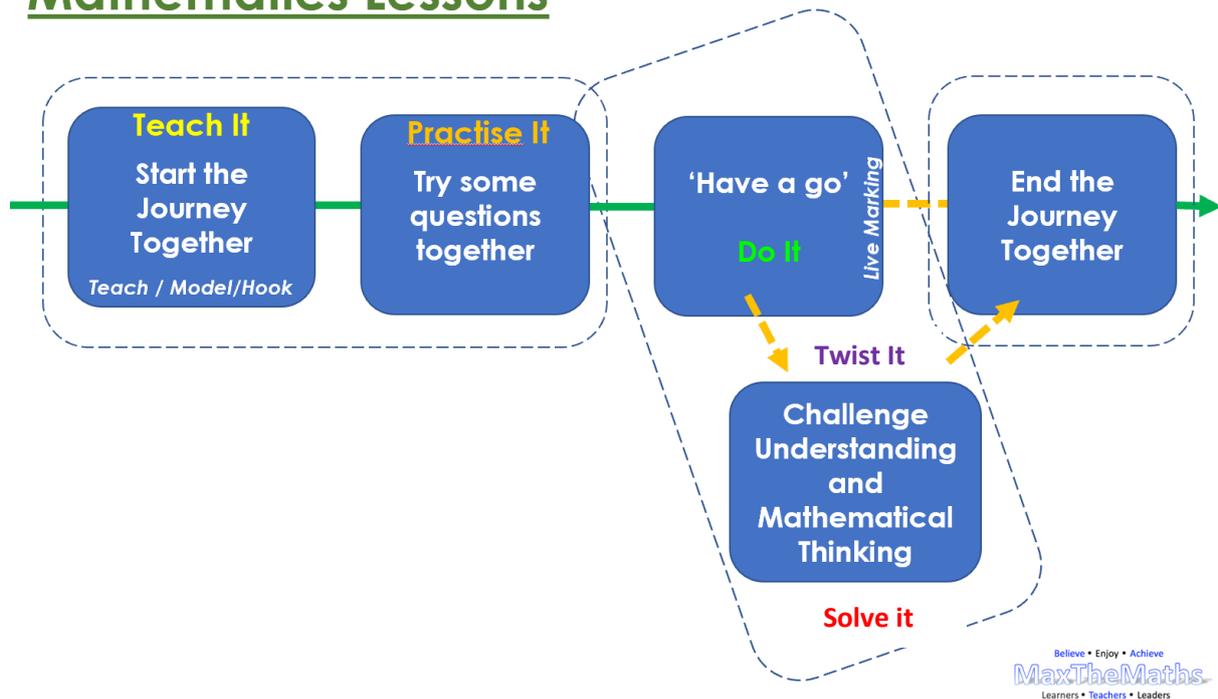
**E** - embedded

The provision, therefore, should provide opportunities for the pupils to independently apply mathematical skills. However, provision should never be forced. For example, maths should not be done outside for the sake of doing "outdoor learning". Instead, meaningful opportunities should be found to apply maths both in the classroom and in the outside space. Provision should be made appealing for the pupils, to excite them about maths and motivate them to choose maths activities.

Adults in the environment should seek to scaffold mathematical conversation and prompt use of mathematical language. Early Excellence Continuous Provision Planning and CWPA short term plans, will be clearly displayed in the maths area to support with this.

### Lesson flow model

## Mathematics Lessons



The diagram above outlines the different stages of the direct teaching and group work elements of EYFS maths. Each stage is deliberately included to achieve a specific purpose.

### Teach it - whole class stage

**PURPOSE - model to the pupils how to be successful with the learning intention.**

At this stage, it needs to be considered how you will demonstrate to the pupils how to do the mathematical skill you are working on. It will almost always be appropriate to use pictorial or concrete resources at this stage to help pupils understand the learning; however, only one representation or resource should be used (i.e. the one that is best to help the pupils understand).

It is important to drive home key messages at this stage that will help the pupils be successful. The key message could be:

Learning	Key message
Recognise triangles	Triangles have three straight sides

The key message usually relates to a misconception. To test the pupils during the "Teach It" it is useful to try and trick them with a misconception (i.e. making the mistake deliberately and having the pupils correct you).

During the teach it, "Live Maths" should be created. This is where you record your modelling on flipchart paper so that the pupils can refer to it during the modelling. This flipchart paper should then be displayed on a Maths Washing Line for the duration of the Maths unit.

It is helpful to make use of stories, songs and rhymes to support the teach it.

### Practise it - whole class stage

**PURPOSE - act as a bridge between the teach it and do it**

Before the pupils move on to independent application, they first need to practise the skill you have taught them. This would often be on whiteboards. During the practise it, you need to be assessing whether pupils are ready to move onto the do it. If they are not, they might need some additional explanation or adult intervention during the do it.

### Do it - small group work stage

**PURPOSE - challenge procedural fluency**

As the name suggests, the point of the "Do It" is for pupils to do the learning intention. It should not be over complicated but just be basic questions that follow on from what you have taught.

Often, it will be good to make use of practical activities at the do it stage.

Attention should be paid to variation theory (what it is, what it is also). Variation theory stresses making small, deliberate changes to how a question is presented in order to test procedural fluency.

\*If pupils are not successful at the Do it stage, plans need to be put into place to think through what additional support can be put in.

### Twist it - Whole class stage or small group stage as appropriate

**PURPOSE - challenge pupils understanding by making them explain misconceptions**

The purpose of this stage of the lesson is to throw a misconception at pupils and get them to explain why it is wrong. This could be something like.



Melissa thinks this is a triangle because it has three sides. Is she correct?

In EYFS, this could be a whole group activity. For example, the teacher might be ordering numbers and put 3 and 4 the wrong way around or draw a 6 backwards. The teacher would then ask the pupils what mistake had been made and they would discuss this in partners.

### **Enhanced Provision**

Following direct teaching, resources relating to the current maths objective should be available in CP. Children may then choose to independently apply, consolidate and extend their learning.

As well as the specific Maths CP and enhancements, it is necessary to think about natural opportunities for Maths learning to be applied in the following areas

- Sand/water (outside)
- Role Play
- Creative
- Small world
- Story corner

### **Differentiation**

We do not differentiate by task, instead looking to support & challenge through every step of our lesson design. This ensures that pupils do not get held behind by not being exposed to age-appropriate learning\*. In addition, it stops children being held back by being labelled as "low ability". Instead, we provide support for any pupil who needs it.

Support means:

- Always using pictorial and/or concrete resources to scaffold the learning.
- Using the "Practise It" as an opportunity for AFL and supporting further where necessary.
- Using adult support (without removing independence).
- Same day or next day intervention to stop gaps appearing in the first place.

\*Some of our pupils will have recognised and specific SEND. These pupils will not be able to access the same learning as others at times (although assumptions should not be made that this is always true). Where they need to access a different curriculum, their learning should be guided by their PLPs.

In the same way that we do not label pupils as low ability, we also do not label pupils as high ability. This means that all pupils will follow our normal lessons sequence. Alternative lessons are not required, as we provide deliberate challenge at every stage of the lesson.

## **AFL**

Daily AFL will be happening through questioning and observation of what pupils are doing independently.

Evidence for each child could include:

- Post it notes of what they are doing
- Short observations
- Pictures
- Transcripts of conversation.

## **Environment**

### **Working Wall**

Working walls for Maths should include the following:

- Vocabulary for that unit
- Space for WAGOLs (celebrations of good work)
- annotated photographs which depict our learning journey.

## Live Maths

On a Maths washing line, you should display any live Maths created for that unit of work. Each piece of live Maths should have the learning intention on it.

## Exercise Books

Maths exercise books will not be used initially in EYFS. When it is deemed appropriate for a child to record their work in an exercise book, the following format will be followed:

1. Unit Front Sheet (just the planning front sheet)
2. Work from the unit (including pictures where the learning is predominately practical).