Dereham Church Infant and Nursery School- Mathematics



Year group: I Area/topic: Mathematics- Length and height

 Compare, describe and solve practical problems for: lengths and height; mass/weight; capacity and volume; time
 Measure and begin to record the following: lengths and heights; mass/weight; capacity and volume; time

Prior learning	Future learning
, i	Children will apply these skills and knowledge when learning to order length and height in year 2.

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
Compare lengths and heights	Children to stand back to back with a
	friend. Who is taller/who is shorter?
Measure length using objects	Photos of children using cubes to
	measure a stick
Measure length in centimetres	Photos of children measuring a selection
	of paper straws using a ruler
Key vocabulary	
Longer, taller, shorter, equal, non-standard, standard,	
centimetres, length, height,	

Common misconceptions	Books linking to this area
• Children may confuse the words "longer" and "taller". • If children do not line up the objects they are comparing, they decide incorrectly which is longer/taller. • Children may thin that two different objects cannot be equal in length/height. • Children may think that they can use a combination of different objects to measure a length. • When comparing length children may think that they can use a different unit of me for each item. • Children may measure from the start of the rather than from zero. • Children may just look at the final number without ensuring that the ruler is lined up so that it is at the beginning of the object. • For measures that are nexact number of centimetres, children may be unsure what the	may uk gths, asure ruler zero ot an
Memorable first hand experiences	Opportunities for communication
Measuring height standing back to back with friends Measuring a selection of natural objects using cubes	Ask key questions and discuss Discuss and answer stem sentences provided by White Rose Discuss/debate What's the same/what's different?

Communication and Interaction

Use a range of visual aids Give clear instructions one at a time Repetition

Provide simple instructions
Pre teach vocabulary
Use working wall where modelling is displayed
Give children thinking time
Model task

Cognition and Learning

Check understanding regularly
Allow rest breaks
Give thinking time
Colour code signs that could be confusing
Work checklists
Break down tasks into small steps
Give opportunities for over-learning

Social, Emotional and Mental health

Allow access to a quiet and calm space Give child a special role to increase self esteem Provide a visual support- what to do if you are stuck

Provide a movement break
Seat pupil by more confident peer
Now and next board
Sand timers
Movement breaks
Break down tasks into small steps

Sensory and Physical

Consider carpet space position
Reduce background noise
Provide a range of manipulatives- dienes may be
too small
Appropriate seating

Wobble boards
Writing slope
Enlarge text
Variety of writing tools available