Dereham Church Infant and Nursery School- Mathematics

	Year group: 2	Area/topic: Mathematics- mass, capacity and temperature
	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and =	

Prior learning	Future learning
In Year one children completed a block of learning on mass, capacity and temperature.. Non standard units were used to measure. Children had many opportunities to compare and describe mass, volume and capacity.	This learning will be used and applied to solve more complex 2 step problems. They will look at mass, capacity and temperature further in year 3.

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
To compare mass To measure in grams To measure in kilograms Four operations with mass To compare volume and capacity To measure in millimetres To measure in litres Four operations with volume and capacity Temperature	Photos of using balancing scales Opportunities to weigh items Weigh a range of items Solve word problems Opportunities to explore with vessels Use a selection of containers to measure Read and interpret a selection of scales Solve word problems Take temperatures in different areas

Key vocabulary	
Mass, heavier, lighter, balance, gram, kilogram, volume, capacity, millilitres, litres, thermometer, temperature,	

Common misconceptions	Books linking to this area
Children may not be able to use balance scales accurately. For example, they may place the objects on one side too close to the centre, meaning that the scales cannot be used to accurately compare the masses. Children may think that the larger the object, the greater its mass must be. Children may not understand the difference between kilograms and grams Children may think it is impossible to compare the capacities of two different-sized/shaped containers.	A house for birdie Sam and Dave dig a hole Room for Ripley
Memorable first hand experiences	**Opportunities for communication**
Many opportunities to measure using a range of apparatus.	Completing sentence stems provided by White Rose Reasoning their ideas and thinking Partner and group work

DCINS Reasonable adjustments for pupils with SEND

Communication and Interaction	Cognition and Learning
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	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	**Sensory and Physical**
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	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