## First Level - Beyond Number Measure Homework Cards



#### M1.1 I can talk about how measurements are used all around me

Measuring the family Children draw their family members, putting them in order of height. Then they draw them in order of age. In class, talk about whether the two orders are the same.

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### M1.1 I can talk about how measurements are used all around me

Measures at home Children look for five examples of recorded measurements (on food and other packaging). They copy these down and bring them to class. Help children interpret the recordings and discuss whether the measure is of weight, length or capacity.

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M1.2a I can compare and order the measurements of different objects using direct comparison and non-standard units - Length

Shorter than / longer than Children find and draw three things that are shorter than their hand span and three that are longer.



M1.2a I can compare and order the measurements of different objects using direct comparison and non-standard units - Length

Non-standard units in the home Give children a list of 10 things they are likely to have at home, e.g. TV, magazine, toothbrush, mug, spoon. Children choose a *body* unit of measure such as their finger width or hand span to measure the lengths of five of these objects.

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M1.2b I can compare and order the measurements of different objects using direct comparison and non-standard units - Weight

Heavier than/lighter than in the home Children find and draw three things that they think are heavier than their pencil or pen and three they think are lighter.



M1.2b I can compare and order the measurements of different objects using direct comparison and non-standard units - Weight

Heaviest to lightest Children choose five objects from around the home and draw them in order, from (estimated) heaviest to lightest.

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M1.2c I can compare and order the measurements of different objects using direct comparison and non-standard units - Capacity and volume

More or less *cup*, *containers* Tell children they need to work over a sink. They choose a cup and find three containers that hold more and three that hold less.

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M1.2c I can compare and order the measurements of different objects using direct comparison and non-standard units - Capacity and volume

Large and small Children look around the home and choose which they think is the largest container and which is the smallest container. They draw these, and bring the drawings into school to discuss.

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M1.2d I can compare and order the measurements of different objects using direct comparison and non-standard units - Area

Larger or smaller Children choose an object at home (e.g. a newspaper sheet, DVD case, flattened biscuit wrapper) and find and draw two flat objects that they think have a larger area and two with a smaller area.



M1.2d I can compare and order the measurements of different objects using direct comparison and non-standard units - Area

Hands Children compare palms with other family members by placing their hands against each other. Each time, they record which of the two people has the larger hand and which has the smaller hand.



M1.3 I have explored the need for standard units and can talk about different types

Shoes Children draw round one of their own shoes and the shoe of another family member. They bring these shoe outlines to class where they cut them out. They lie down on the floor and get a partner to measure their length, first using the larger shoe, then the smaller one. Discuss the different results.

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# M1.3 I have explored the need for standard units and can talk about different types

Rulers 50 cm paper strips Children make a ruler by marking a strip of paper (about 50 cm long) using their own hand spans. They bring these back to class and compare and discuss them. Is five of Euan's hand spans the same as five of Bella's hand spans?

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### M1.4a I can estimate, measure and compare different quantities - Length

Estimating the length using my span In class, children measure the length of their hand span, e.g. 8 cm. Children use this to estimate the length of five objects at home and convert this to centimetres, e.g. the computer monitor is around six hand spans so it must be about 40 cm.

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#### M1.4a I can estimate, measure and compare different quantities - Length

What unit would I use? Children choose five objects at home (e.g. fork, bath, table, shoe, length of living room) and write them down. Beside each object they record what tool and what unit they would use to measure it.



#### M1.4b I can estimate, measure and compare different quantities - Weight

Remembering weight Children feel a kilogram weight at school and try to fix in their memory how heavy it feels. Then at home they find five things that weigh about the same amount. For each object they write down whether they think it is about a kilogram, or a bit more, or a bit less.

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#### M1.4b I can estimate, measure and compare different quantities - Weight

Collecting objects Children find three objects that they can contribute to a class collection of things to weigh, e.g. a leaf, a sheet of newspaper, a matchbox, an apple. Work together to create a display showing estimates of the weights of the objects.

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# M1.4c I can estimate, measure and compare different quantities - Capacity and volume

Containers Children look for containers whose contents are measured in millilitres and record the container and amount. In class, collect all the results and put them in order. Aim for as long a list as possible.

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# M1.4c I can estimate, measure and compare different quantities - Capacity and volume

Estimating capacities Children choose three or more containers at home and estimate how much each holds when full, recording the container and the estimate. In class, share and discuss their notes. Who chose a mug as one of their containers? What was the smallest capacity anyone estimated? How big would such a mug be?

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### M1.4d I can estimate, measure and compare different quantities - Area

Square centimetres or square metres? Children write down the names of five items at home whose area they would measure in square centimetres and another five items whose area they would measure in square metres.

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#### M1.4d I can estimate, measure and compare different quantities - Area

Bigger or smaller? In class, children find out and record in square centimetres the approximate area of the palm of their hand, and of the circle they make by touching their forefinger and thumb together. They use this knowledge to estimate the areas of 5-10 objects at home.

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#### M1.5 I can solve problems involving measures

Body-measure links Tell children that the length of a person's outstretched arms (fingertip to fingertip) is approximately the same as their height. Ask them to check this on themselves or with family or friends. First, while still in class, children discuss with a partner how they will check this, whether they have (or need) measuring tools, how to manage without tools, who they will measure, and so on.



# M1.5 I can solve problems involving measures

Sweet wrapper :	<i>l cm squared</i> paper (	3ive children cm s	squared paper	and ask them	to design a wrapper i	for a new
cube-shaped cho	colate bar whose hei	ght, width and ler	ngth are all 2	cm.		