

The Flourish Federation—Knowledge Organiser

Brookfield Infant and Junior Schools



Subject Focus: Maths | **Year 1 - Term 4** | **Measure** (Length, Height, Weight, Capacity)

What? (Key Knowledge)

Compare, describe and solve practical problems for **lengths and height** (use language like: long/short,

Compare, describe and solve practical problems for **mass and weight** (use language like: heavy/light, heavi-

Compare, describe and solve practical problems for **capacity and volume** (use language like: full/empty,

Measure and begin to record: lengths and height (mm/

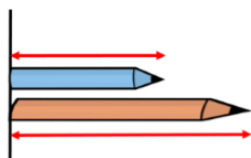
What? (Key Vocabulary)

Vocabulary	Comments
Capacity/Volume	The maximum amount of liquid of that a
Weight/Mass	How heavy something is
Measuring cylinder	Containers/jugs used to measure the amount of liquid
Balance Scales	Equipment used to compare weights
Scales	Equipment used to weigh something

Visuals/Diagrams

Comparing Ensure if comparing length/height both objects are at the same starting point.

Length



Height



Weight

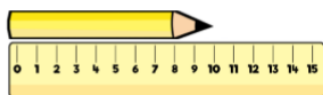


Capacity



If comparing using non-standard units of measure (eg cubes) ensure to use the same so comparing is fair.

Measure Measure using rulers as well as non-standard units of measure (cubes, feet, hands etc)



It takes 5 to fill 1



A



B



C



D



empty



full

How many will it take to fill 2 buckets?

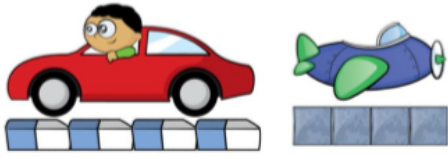
What about three buckets?

Four buckets?

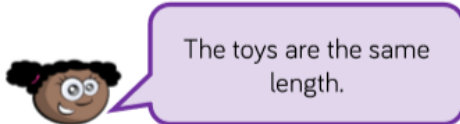
What do you notice?
Can you continue the pattern?

Examples of Reasoning

Whitney measures the length of two toys.



She says,

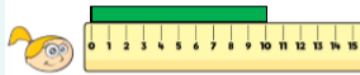
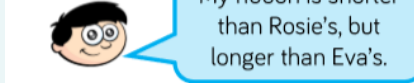


Do you agree with Whitney?
Explain your answer.

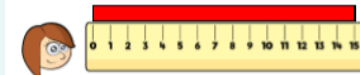
Whitney is wrong. Both toys are 4 units long, but the rubber and the cubes are different lengths so the toys are not the same length.

Eva, Dexter and Rosie are comparing ribbons that they have. Unfortunately, Dexter has lost his ribbon.

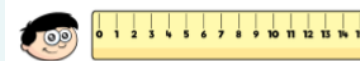
He says,



Eva



Rosie



Dexter

How long could Dexter's ribbon be?

Possible answers:

11 cm
12 cm
13 cm
14 cm

Examples of Problem Solving

Always, Sometimes, Never?

The tallest container holds the most liquid.

Identical containers can have a different capacity.

Show me.

Sometimes.

Choose three containers. Investigate how you could compare the capacity of each one.



Children choose three containers and choose a unit of measure to compare the containers' capacities.

Never - If the containers are identical they will have the same capacity but they can have different volumes of liquid in.

Using classroom equipment, can you find an object which is longer than your rubber but shorter than your pencil?

Can you find a friend who is shorter than you but taller than your other friend?

Children could explore other items and situations where they are asked to compare more than two objects.

ICT Opportunities

Purple Mash:

- https://www.purplemash.com/#tab/pm-home/maths/measures/maths_measures_all

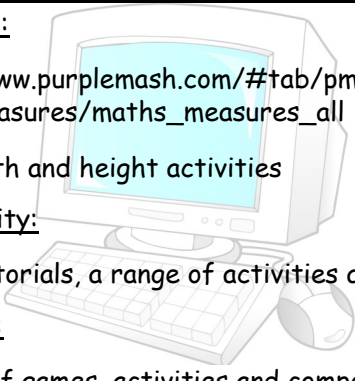
- Many length and height activities

Education City:

- Videos, tutorials, a range of activities and games

Manga High:

- A wealth of games, activities and competitions



Daily Maths

- Questioning during the register (How many people are absent? How many children are here? How many more children have school dinners than packed lunch).
- Lining up games - counting on/back, 2x, 5x and 10x table games
- Days of the week/months of the year

