

# Compare Mass (2)

## Guidance

Children may already have some experience of weight through carrying heavy and light items.

Encourage them to make direct comparisons holding items to estimate which feels the heaviest then use the balance scales to check. Prompt them to use the language of heavy, heavier than, heaviest, light, lighter than, lightest to compare items starting with items which have an obvious difference in weight. Avoid the common misconception that bigger items are always heavier by providing some small, heavier items and some large, lighter ones.

## Other Resources

Who Sank the Boat – Pamela Allen

The Blue Balloon – Mick Inkpen

Balancing Act – Ellen Stoll Walsh

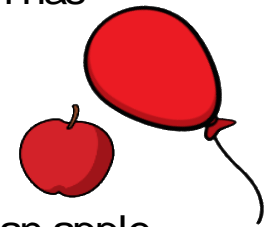
## Prompts for Learning

Bring in a heavy case or box. Show the children that it is difficult to lift and carry because it is really heavy.

Ask if they have ever carried anything heavy?

Ask the children to discuss what could be inside.

Ask the children to be human balance scales – place an item on each hand and ask them to tip to show which item is heavier and which is lighter. Use the balance scales to check the children's estimations. The children could also hold buckets or bags in each hand and place items inside to feel which has the stronger downward pull.



Give the children an item, for example, an apple. Challenge them to find things which feel heavier and lighter than the apple and sort them into sets.

Use the balance scales to check their estimation.

Are all the heavier things larger than the apple?

Can they find anything which is larger than the apple but lighter?

# Compare Mass (2)

## Dough

Add a set of balance scales to the dough area and encourage the children to compare the weight of different size balls. To provide further interest, encourage the children to use loose parts to balance the dough on the scales.

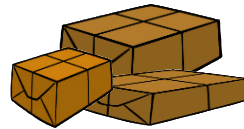


## Loose Parts

Provide a set of balance scales and an assortment of loose parts to compare. Encourage the children to use the mathematical vocabulary of heavier than and lighter than as they compare the different items.

## Post Office

Provide a selection of wrapped parcels of various shapes and sizes. Ask the children to compare parcels to see which are heavier and lighter than others.



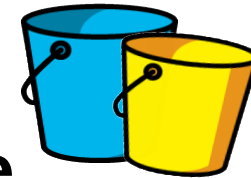
Can they find the heaviest parcel?

Can they find the lightest?

Are larger parcels always heavier?

## Enhancements to areas of learning

## Outside



Provide buckets with strong elastic bands attached to the handle. Ask the children to hold the elastic band and watch how far it stretches when they add an item to their bucket. What do they notice when they add a heavy item? A light item?

# Compare Capacity (2)

## Guidance

Encourage the children to build on their understanding of full and empty to show half full, nearly full and nearly empty. Provide opportunities to explore capacity using different materials such as water, sand, rice and beads.

Provide different sized and shaped containers to investigate. Prompt them to use the language of tall, thin, narrow, wide and shallow.

Encourage the children to make direct comparisons by pouring from one container into another. They can also use small pots or ladles to make indirect comparisons by counting how many pots it takes to fill each container.

## Other Resources

There's a Hole in my Bucket!

Mary Poppins clip – emptying the carpet bag

A Beach for Albert – Eleanor May

## Prompts for Learning

In a small group perhaps during snack time, provide each child with a cup. Ask them to make their cup full, make it empty, nearly full, nearly empty, about half full. Can they find a container which holds more than their cup? Can they find one which holds less?



Provide a selection of containers of different shapes and sizes and ask the children to investigate which holds the most. They may do this by pouring directly from one container to another. They could also use a small cup to fill each container, counting how many small cup-fulls the containers hold. Encourage them to record their results using their own methods of recording.



Provide sets of similar containers in different sizes such as sets of nesting bowls or boxes. The children will enjoy comparing and ordering them and seeing how many loose parts such as beads, cubes or corks they will hold.

# Compare Capacity (2)

## Sand

Provide each child with a bowl or cup and a selection of different sized spoons and ladles.

Ask them to investigate how many small spoons it takes to fill their container. How many large spoons?

How many ladles? Which sized spoon was the best? Why?



## Mud Kitchen



Provide a variety of pans, bowls, spoons and ladles for the children to use. Add daily recipes on a chalkboard to encourage the children to measure out ingredients. They could also design and create their own recipes.

## Outside

Provide a small matchbox for each child. Ask them to hunt for things to put inside. Points could be awarded for specific criteria such as the most items, the prettiest leaf, the smallest pebble, the largest item, the softest item, something yellow etc.



## Enhancements to areas of learning

## Role Play



Set up a pop-up café or picnic area providing a variety of jugs and beakers. Encourage the 'waiters' to take drinks orders and bring out the drinks. Play alongside the children to model the language of nearly full, half full, nearly empty etc and enjoy your delicious drinks! (Discuss why we don't want the cups to be absolutely full!)

# Digging Deeper

## Number Shapes Balance

Provide a set of balance scales and some number shapes. Explore how to balance a number shape for example 5 by putting the 5 piece on one side of the scale and exploring different combinations to make it balance.

How many different ways can they find to balance 5?  
What other combinations of shapes balance?



Encourage the children to use the language of equal to, heavier than, lighter than, heaviest, lightest.

## Key Questions

What happens if I put a 5 piece on one side of the scale and two 3 pieces on the other?

Which is heavier, two 2 pieces or one 5 piece?

Which is the heaviest number shape? Which is the lightest?

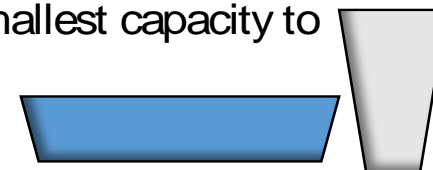
How many ways can you find to balance 5 exactly?

Can you find ways to balance 4 or 3?

## Which Holds More?

Provide a tall narrow container and a wide shallow one. Ask the children to predict which will hold more water? How could they check? Encourage the children to try different methods.

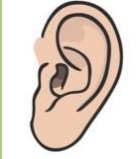
More containers could be added and the children asked to order them from smallest capacity to greatest.



# To be able to follow simple rules and expectations

Date:

1. Good listening



2. Good sitting



3. Good looking



4. Wait for your turn to speak/ answer



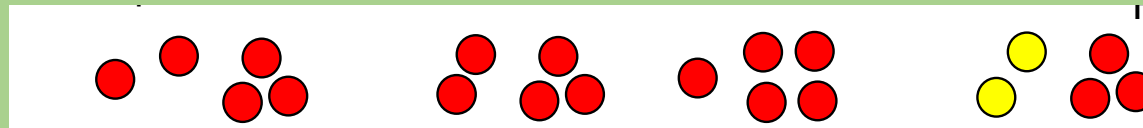
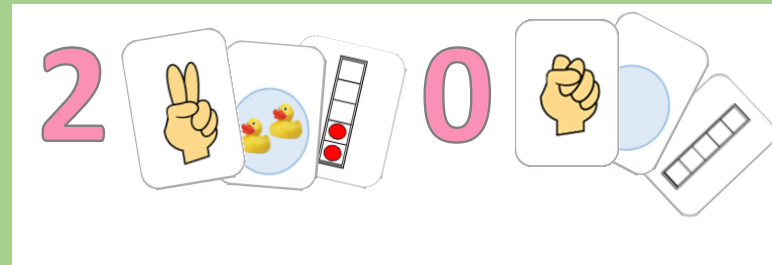
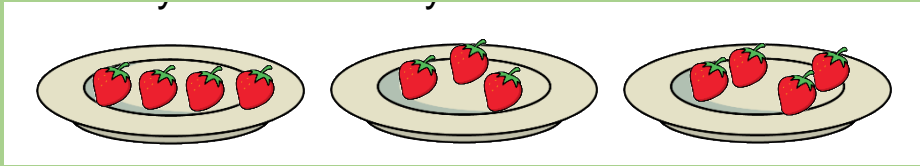
5. Hands to your self



**Word bank**

Alive in 5

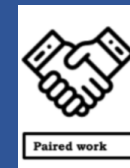
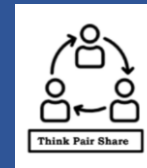
Date: Spring 1  
(WRM)



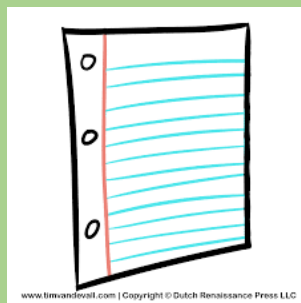
Word bank

We will be learning about numbers again (0-5). We will focus on more, less, equal. We practise one more and one less. We will practise adding and taking away. We will also focus on weight, size and height.

LO: To make simple comparisons with weight  
 To use key vocabulary correctly  
 To order objects in weight order



Date:



Estimate (verbally make the estimate – tick if you were correct)	Heavy	Light	Balanced

Recap yesterday's main activity :

Have your scales ready and recap weighing different objects.

*Practise making an estimate and checking your if you were right or wrong. Work as a group to estimate which item will be the heaviest and which will be the lightest. Or will they balance*



LO: To make simple comparisons with capacity  
To use key vocabulary correctly  
To order objects in capacity order

Date:

**Nearly Empty**



## Word bank

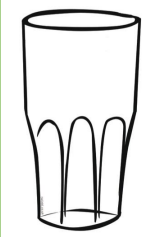
Full  
Half full  
Nearly full  
Empty  
More  
Less  
Equal  
Nearly empty

Recap the different capacities from our Autumn lesson.  
Use visuals to support this learning and ask the below questions.

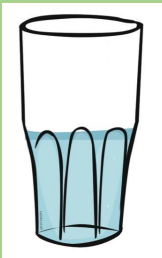
How do you know it is full/ empty/ half?  
How can I make it empty?  
When do I stop to make it full?

LO: To make simple comparisons with capacity  
To use key vocabulary correctly  
To order objects in capacity order

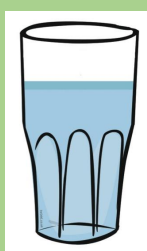
Date:



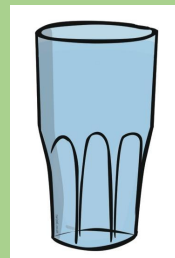
**Empty**



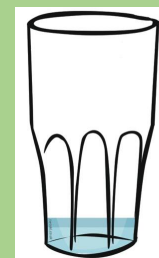
**Half**



**Nearly Full**



**Full**



**Nearly Empty**

## Word bank

Full  
Half full  
Nearly full  
Empty  
More  
Less  
Equal  
Nearly empty

Recap the vocabulary

### Main Task:

Spend some time exploring the different capacities at home.  
Try making the capacities and labelling them using the correct vocabulary.  
Capture a video.  
See the next slide for fun ideas to carry out the activity.



Paired work



Use objects to practice capacity (cotton balls/ marbles/ cubes/ buttons



Go on a nature walk and collect stones, twigs and leaves. Practice capacity using natural resources.



When your adult is cooking, you could use ingredients/ items from the kitchen. You could use flour/ lentils/ daal etc



Use water

To make it fun, you can add glitter/ food colouring to the water

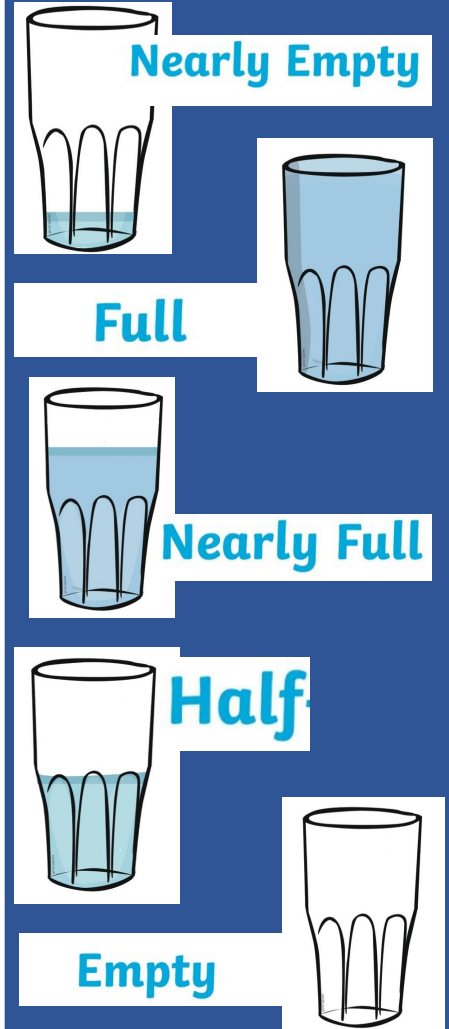
### Key Questions:

How do you know it is full/ empty/ half?

How can I make it empty?

When do I stop to make it full?

Date:



LO: To make simple comparisons with capacity  
To use key vocabulary correctly  
To order objects in capacity order

Date:



## Word bank

Full  
Half full  
Nearly full  
Empty  
More  
Less  
Equal  
Nearly empty

Plenary: Watch the Mary Poppins Clip – emptying the bag

As she empties the bag, discuss what she is doing? What was her bag like before?

As she pulls everything out, what happens?

Do you think those things can really fit inside the bag? How could that happen?

<https://www.youtube.com/watch?v=AivZSC9J3Rs>

