

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

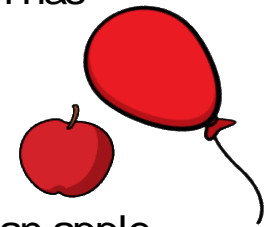
Prompts for Learning

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.

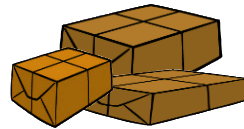


Loose Parts

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.



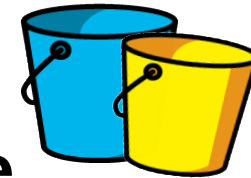
Can they find the heaviest parcel?

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?

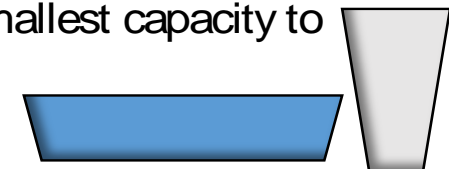
How many ways can you find to balance 5 exactly?

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.

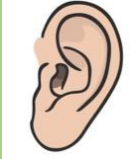
More containers could be added and the children asked to order them from smallest capacity to greatest.



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



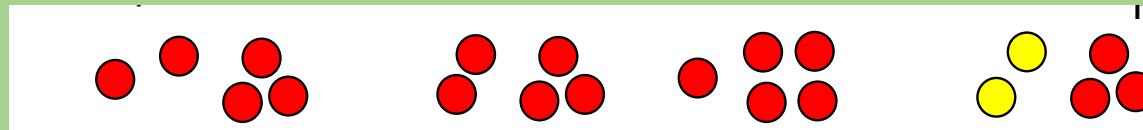
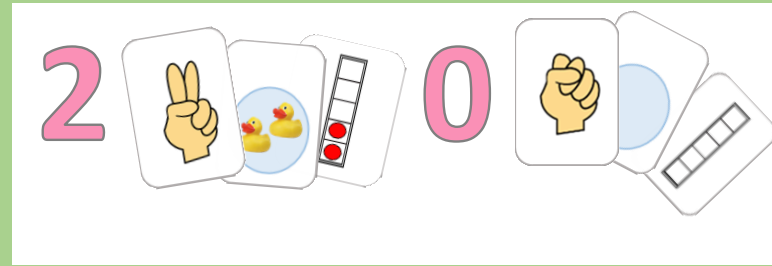
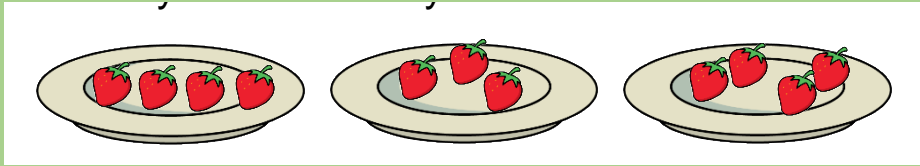
5. Hands to your self



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.

Alive in 5

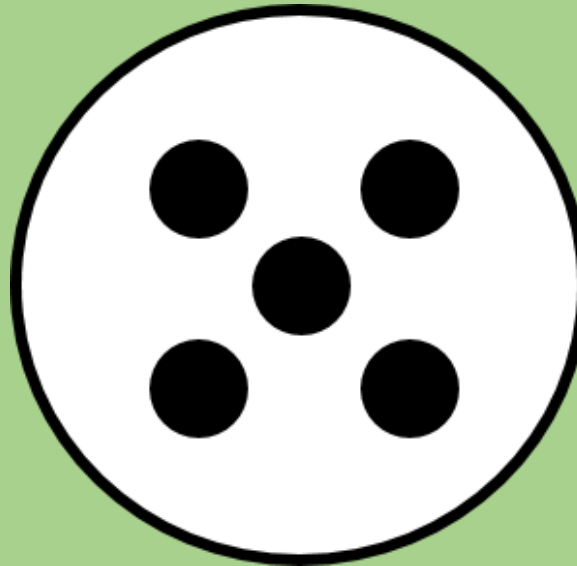
LO: To make comparisons between amounts

LO: To identify one more and one less of an amount

Date: Tuesday

How many red dots and black dots can you see?

Can you compare the dots. Which has more and which has less?



How many altogether? How do I write that as a number sentence?

What will be one more of that amount?

Word bank

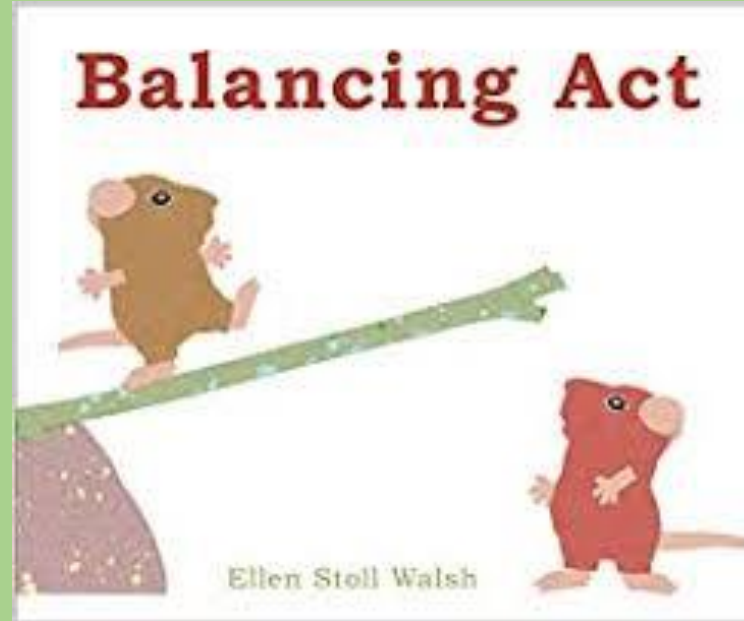


Recap/ starter: solving problems involving comparisons/ one more/ one less and making amounts.

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

Date: Tuesday

1. How do we know that they are balanced?
2. What do you think will happen when more animals join?
3. How could they make it balanced?
4. How do we make it lighter?



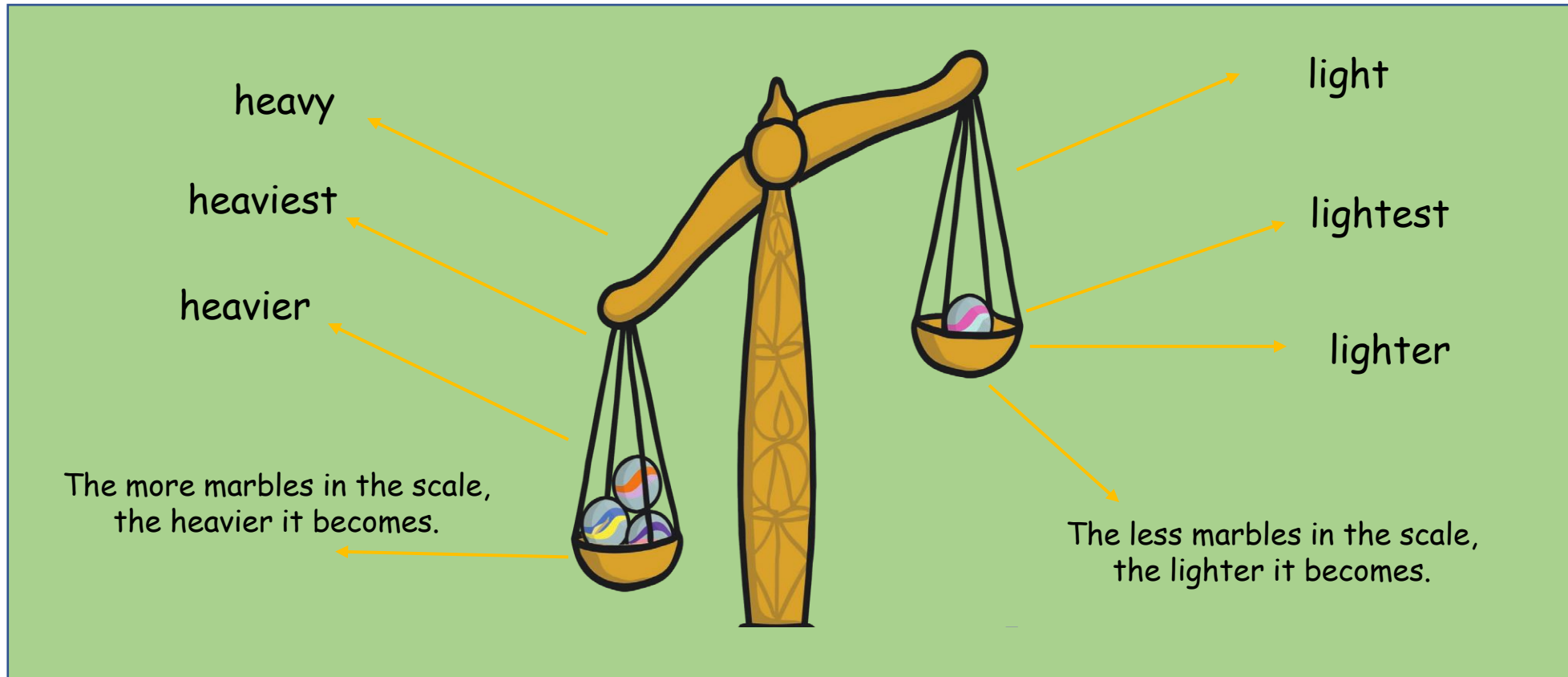
Word bank



Recap yesterday's story
What are we focussing on?
What words are we focussing on?
Recap key words on the next 2 slides

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

Date:



Word bank

More
Less
Heavy
Light
Heavier
Lighter
Lightest
Heaviest
Balance
equal
scales

Recap: Have a set of scales ready for this lesson

1. Recap the vocabulary



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

Date:

Word bank

More
Less
Heavy
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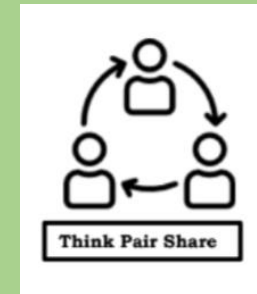


Recap: Have a set of scales ready for this lesson

1. Recap vocab

LO: To make simple comparisons with weight
To use key vocabulary correctly
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Date:



Word bank

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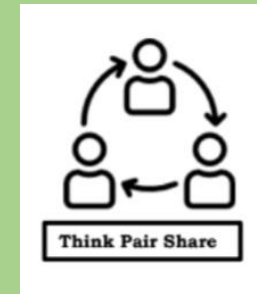
Have a set of scales ready for this lesson and a range of objects , set the scale up so the children can see. Base this lesson on questioning and experimenting.

1. How can we make our scales the same as the picture?
2. What do the scales need to do?
3. What can you tell me about the scales?
4. Which side is the heaviest? How can you tell?
5. Which side is the lightest? How can you tell?



LO: To make simple comparisons with weight
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To order objects in weight order

Date:



Word bank

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Have a set of scales ready for this lesson and a range of objects , set the scale up so the children can see. Base this lesson on questioning and experimenting.

1. How can we make our scales the same as the picture?
2. What do the scales need to do?
3. What can you tell me about the scales?
4. Why are both sides the same?



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



Date:



Word bank

More
Less
Heavy
Light
Heavier
Lighter
Lightest
Heaviest
Balance
equal
scales

Recap what we did yesterday – recap what estimating is and which objects felt heavy and which felt light
For the next activity, can you go and get the same objects/ you can get different objects if you wish



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



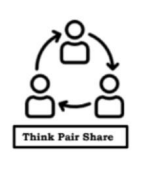
Date:

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

You will need your scales that you made yesterday
You will need your worksheet too/ or you can draw this out on a board or paper



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



Date:



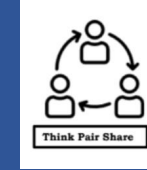
Estimate (verbally make the estimate – tick if you were correct)	Heavy	Light	Balanced

MAIN ACTIVITY:

Teacher to model first – children to watch

- Look at my 2 objects
- Estimate which one do you think will be heavy and which will be light/ or will it be balanced? Why do you think that/ what will happen to the scales?
- Test your theory
- Model recording it on the worksheet.
- Practise doing it with the adult a few times

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



Date:

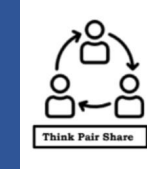


Estimate (verbally make the estimate – tick if you were correct)	Heavy	Light	Balanced

MAIN ACTIVITY: Now it is your turn

- Select 2 objects
- Estimate which one do you think will be heavy and which will be light/ or will it be balanced? Why do you think that/ what will happen to the scales?
- Test your theory
- Record it on the sheet
- Can you compare the objects using the correct vocab and say it in a full sentence.

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



Date:



Plenary video

<https://www.youtube.com/watch?v=EkpJtf5QOsQ>