

Talk About Length, Height and Distance

Planning Ideas

Introduction




This Talk About Length, Height and Distance Maths PowerPoint, Poster and Activity aims to encourage children to learn about length, height and distance. The colourful picture shows a gardening scene that children will enjoy talking about and exploring. Within the scene, there many opportunities for children to make comparisons based on length, height and distance and to use the appropriate vocabulary.

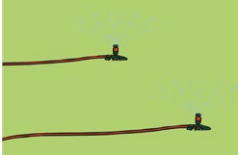


When using these Talk About Resources, begin by encouraging the children to look at the scene and use full sentences to talk about what they can see. You may wish to focus on key elements of the picture for further discussion, to encourage the children to develop their understanding of length, height and distance.

Questions and Prompts

Below are some questions you may like to use when focusing on different aspects of the PowerPoint or Poster.

- What can you see in the picture?
- Can you describe the pictures you can see?
- Can you compare the pictures?
- Which is longest/shortest/highest/nearest?
- Can put them in order of height/length/distance?

<p>Sunflowers</p> 	<p>What can you tell me about the sunflowers?</p> <p>Can you describe them? Use this as an opportunity to model the use of superlative adjectives, such as tallest, shortest.</p> <p>Are they in order?</p> <p>If one more sunflower grew and it was the shortest, where would it grow?</p> <p>You may like to talk about whether the children have grown sunflowers. Encourage them to describe how tall they were.</p>
<p>Cats in the Tree</p> 	<p>Can you tell me what you can see? Can you describe where the cats are?</p> <p>Which cat is nearest to the ground? Which cat is the highest in the tree?</p> <p>Use this picture as an opportunity to talk about high and low, and also near and far. Model the comparative adjective, such as higher and lower.</p>
<p>Watering the Garden</p> 	<p>Look at the two children watering the garden. What can you tell me about the water?</p> <p>Which child's water is travelling further?</p> <p>Who is watering the plants that are far away? Who is watering the plants that are near?</p> <p>You may like to take the children outside with a hosepipe. Can the children describe how far the water travels when the pressure of the water is increased? How far can you get the water to travel?</p>

<p>Sprinklers</p> 	<p>How many sprinklers can you see?</p> <p>What is the same and what is different?</p> <p>Can you describe the two sprinklers?</p> <p>Which sprinkler has a long/short hosepipe?</p> <p>Which hosepipe is longer/shorter?</p>
<p>Mum and Daughter and Their Spades</p> 	<p>Can you describe the two spades? What do you notice about them?</p> <p>How are they different?</p> <p>Which spade is taller/shorter?</p> <p>Which spade belongs to Mum? Why do you think that?</p> <p>If the girls little brother had a spade, do you think it would be taller or shorter than hers? Why?</p>
<p>Basket of Tomatoes</p> 	<p>What has happened to the basket of tomatoes?</p> <p>Which tomato has rolled the furthest?</p> <p>Which is nearest to the basket?</p> <p>Can you describe where the other two tomatoes are?</p> <p>You may like to model the use of superlative adjectives to describe concrete objects in the classroom, such as rolling three balls and saying which is far, further and furthest away.</p>

Adult-Led Activity Ideas

Use the Talk About Length, Height and Distance PowerPoint or Poster to discuss this concept, make comparisons and use vocabulary. Then, try these adult-led activities to encourage children to deepen their understanding of length, height and distance. These adult-led activities could be used with small groups to promote further discussion and begin to use comparative (longer, taller) and superlative (longest, tallest) adjectives.

Comparing Flowers

- Use the flowers, leaves and plant pot cut-outs from this [Parts of a Plant and Plant Pot Display Cards](#). Provide the children with green paper that can be cut into strips of different lengths.
- Tell the children that they are going to imagine a flower has grown in their plant pot. Can they select a flower and then cut a strip of green paper to be the stalk? The children can glue the flower and stalk to the plant pot picture. Encourage the children to describe their flower. Encourage the children to use the vocabulary of height by using the words tall or short.
- Now, ask the children to show another flower growing from their pot. This time, the plant needs to be taller than the other flower. Encourage children to describe their picture using the vocabulary tall and short and also the comparative adjectives of taller and shorter.
- Finally, ask the children to show one more flower, this time the flower needs to be the shortest flower. Once again encourage the children to compare the three flowers and this time use superlative adjectives, such as shortest, tallest to make comparisons.

Digging for Carrots

- In a digging area or large activity tray filled with soil, bury real carrots of varying lengths. Provide the children with garden tools for digging.
- Tell the children that you need their help to dig up the carrots that have been growing in the soil. Ask the children to dig and find two carrots. Once they have found two carrots, ask the children to make comparisons of length. Which carrot is long? Which is short? Which carrot is longer or shorter? Ask the children how they can be sure and encourage them to make direct comparisons by laying the carrots next to each other.
- Ask the children to find one more carrot. Is this carrot longer or shorter than the other carrots? Ask the children to place the carrots in order of length and make direct comparisons to check that they are correct.
- Model and encourage the use of vocabulary to compare the three carrots, such as 'This is the short carrot', 'This is a longer carrot' and 'This is the longest carrot.'
- To challenge children, you may wish to ask them to compare and order more than three carrots.

How Far Does It Roll?

- In a basket, collect some small balls of different colours to represent some fruits or vegetables, such as a red 'tomato' ball, a green 'pea' ball, an orange 'orange' ball and a brown 'onion' ball.
- Remind the children that in the picture, the basket of tomatoes had tipped over and the tomatoes had rolled away. Tell the children that they are going to look at some other fruits and vegetables to discover which rolls the furthest.
- Show the children the basket and talk about the fruits and vegetables represented by the coloured balls.
- Tell the children that we are going to tip the basket over and watch the balls rolls away.
- Once the balls have stopped rolling, ask the children to describe where they have stopped in relation to the basket.
- Can the children use the language of distance to tell you where the balls are? Which has travelled the furthest? Which is nearest? Can the children use comparative vocabulary, such as nearest, near, far, further and furthest?

Activities for Continuous Provision

Below are some suggestions of ways to enhance your continuous provision to encourage further exploration of this concept.

- Encourage the children to make worms out of playdough. Can they make one worm and then make a longer and shorter worm? Challenge the class to see who can make the longest worm of all! You may like to use these [Longer and Shorter Worm Playdough Mats](#).
- Provide children with sunflower seeds, paper cups and compost to plant and place in the classroom for observation. Remember to encourage handwashing after this activity. Encourage the children to make predictions about the height their sunflower will grow.
- Set up a ramp with some cars or balls. Invite the children to have races and discuss which car or ball rolled the furthest and which is nearest to the ramp.
- Children can explore this [Long and Short Can You Find...? Poster and Prompt Card Pack](#) and use the vocabulary of long and short to talk about the pictures and make comparisons.
- Using interlocking cubes, ask the children to make caterpillars of different lengths. Can the children order the caterpillars they have made and use vocabulary to describe them?
- Provide children with chalk so that they can draw around each other's bodies on the floor. Ask the children to make comparisons between each other's outlines.
- Provide children with small world train engines and carriages. Can the children make a short train and a long train by attaching different numbers of carriages? Can they make three different length trains and order and compare them?

