Parent Advice Sheet: Understanding Size

Size is a form of measurement that includes length, width, depth and height. It also covers distance. Being able to understand and measure different sizes helps us carry out many jobs which rely on mathematical life skills such estimating, counting, comparing and ordering numbers and rounding up and down. It helps us quantify and make sense of the world. Understanding size has connections with other area of maths such as spatial concepts of position, movement and direction and, the amount of space an object takes up.

Children need lots of play and real life experiences that enable them to:

- Compare objects and measurements of the same and different sizes. This starts with opposites such as large and small but moves on to understanding and ordering objects according to length, height, width and so on.
- Measure with a range of non-standard items such as hands or shells and standardised units such as same-size pieces of Lego. Often children like to line up Lego along the edge of a table.
- Draw pictures that depict size and distance. This may be drawing the walk to school or people of different heights. Accuracy or use of a ruler is not important but the discussions with your child using measurement vocabulary matters.
- Understand that lengths of string, rope and other long things stay
 the same length even if rolled up. Opportunities to manipulate
 rope and other flexible materials can help, especially if put in the
 context of a story or use of a puppet.
- Make sensible estimates. You can help by offering choices and suggestions.
- Use a range of measuring tools such as tape measures and rulers.
 Model their use during home improvements and real life measuring jobs. Let your child join in for appropriate tasks.



Be aware...

- Young children may be able to read numbers such as 28cm on a ruler. However, conceptually, this makes no sense to them until they are older.
- Children do relate to their body so use feet, fingers and hands as measuring tools. Be sensitive to your child's feelings about their body size. Focus on the joy of measuring things in their lives.
- To begin to understand distance and moving from one place to another, children need opportunities to move in different ways and to walk, cycle and use different forms of transport. Big distances are hard for children to understand and often children relate to them through the amount of time they feel it has taken.
- Always supervise play with rope, string and other long things.

A handy walk

When on a walk, take an old glove or mitten. Your child can use this to collect objects which fit inside the glove such as a tiny twig, a blade of grass and a little pebble. Back at your home, empty out your glove and have fun talking about and comparing your finds:

- Which is the biggest object you have found? Which is the widest? The shortest? The smallest?
- What objects can fit on your thumb nail? Be laid on your index finger? Held in the palm of your hand?
- What could be used another time? An old sock? A hat? Anything else?

Compare and contrast sizes and amounts

- During meal times talk about the sizes of cutlery, crockery and food
- Looking at opposites when playing outside: the biggest leaf we can find, the smallest leaf, etc.
- When shopping for clothes, show children the sizes of baby clothes and compare with clothes your child is now wearing.

Create lines

Using blocks, bricks, stones or other objects make a line from one place to another. Encourage children to ensure each item touches the next. Try and guess the total and then count to check.

Trail making

Drag a stick along the sand at a beach to make a trail. Estimate then count the number of steps it takes to walk the trail.

Play with ribbons

Roll them up, roll them out, weave and compare lengths. When children play with a ribbon, they learn that whether they jump over it, wrap it up or move and shake it like a snake on the ground, it still stays the same length.

Throw things

Whether it's a welly boot, a flying disk, a ball or paper aeroplane, work out how far they have been thrown. Explore different ways of measuring the distance. This might include footsteps, jumps or using a tape measure.



Rolling challenges

Investigate how far different cars, balls or other rolling objects will travel. Encourage your child to devise their own methods of measuring the distance travelled.

Jumping distances

How many paving slabs it is possible to jump over when walking along a pavement? Find the best patterns in your local area for this past time.

Story time

Books, songs and rhymes are also useful for talking size reinforcing the vocabulary of size and distance. Examples include:

- Goldilocks and the Three Bears
- Jack and the Beanstalk
- The Enormous Turnip