

Size it up

Teaching the concepts of shape and size requires the right vocabulary, but incorporating everyday tasks, jigsaw puzzles and construction is equally important – and ideal at home. By *Penny Tassoni*

Shape and size are concepts that are important for children to gain. In England, they form part of the EYFS area of learning ‘Shape, space and measures’, while in Wales they come under the umbrella of mathematical development. This means that opportunities for children to explore them have to be planned into the curriculum. Happily, there are plenty of practical ways in which children can enjoy learning about shape and size, so there is no call to bring out the flashcards or worksheets!

THE VOCABULARY OF SHAPE AND SIZE

Considering how children will learn the language that relates to shape and size is important as it gives them opportunities to express what they are touching and seeing.

It is surprising how many children reach reception and assign the medium-sized object out of three as the ‘mummy’ one. While this is a clever association, no doubt gained from hearing Goldilocks and the Three Bears, it also reminds us of the need for children to be exposed to precise vocabulary. With a few well-chosen activities and books, this is quite easy. All it requires is an adult to draw their attention to what they are looking at or handling and then to comment on it – for example, ‘You have chosen the smallest ball!’

If opportunities to talk about shape and size are used consistently, children soon pick up the language. A good strategy to assess knowledge of shape and size is to avoid closed questions such as, ‘What shape is this?’ Instead, show interest in what a child is doing and ask them to talk about what they are holding. This may generate a more complex answer and, where a child is struggling, allow us to suggest the terms needed.

EVERYDAY OPPORTUNITIES

Many children learn about shape and size by being involved in household



tasks and everyday routines. Sorting out washing allows children to look at clothes of different sizes, while laying the table involves choosing crockery and cutlery of the right size.

In the kitchen, children see utensils and baking tins of different sizes. The humble activity of washing up can provide ample opportunities for children to think about shapes and textures. Where early years settings bring elements of the everyday into their routine, they often report that children are highly engaged and motivated to communicate.

In the same way, children can learn about size and shape when shopping for fruit and vegetables. Not all settings can take children to the local shop on a regular basis. Instead, it is worth considering creating a well-stocked role-play grocery shop with as many real props as possible, including fruit and vegetables. Some settings also combine snack time with the role-play shop so the children ‘buy’ fruit or vegetables. This creates an easy backdrop for children to be prompted to add in the size of what they wish to ‘purchase’.

PIECE BY PIECE

One of the ways in which children can learn about shape and size is by using jigsaw puzzles. While these traditional toys were once found in most children’s homes, today they are not always given a high profile in shops.

This is a shame because children can gain a range of skills from using them, including problem solving, logic and perseverance.

As jigsaw puzzles are so useful, it is worth thinking about the range of jigsaw puzzles in your setting, how they are presented and whether children need an adult to guide them through the process.

In some cases, children have started a jigsaw puzzle, but have never finished one and so not experienced that feeling of satisfaction when placing the final piece. For more complex jigsaws, children may also need an adult to guide them so that they learn to complete the edges and corners to act as an orientation and, of course, to look at the all-important picture.

As jigsaw puzzles are very affordable, some early years settings add these to the books that they lend out to parents. Ideally, it is worth making sure that jigsaw puzzles are individually chosen so that they meet individual children’s skill levels.

CONSTRUCTION PLAY

Finally, no article about shape and size would be complete without looking at the importance of construction play. Here we can hit a potential barrier as some girls, once they explore gender concept, come to the conclusion that construction is not a feminine activity. This often begins at three or so and can become quite entrenched by four.

As construction helps with spatial awareness and problem solving, and provides cues to talk about shape and size, it is important that we look for ways of encouraging all children to engage at some point with this type of play. It might mean that we need to incorporate elements of construction into other types of play, including small-world and role play to align it more closely with children’s interests.

It might also mean putting out visual prompts that help girls realise that construction can be for them. So, perhaps there is a debate to have about whether pink Lego is the way to go? ■

The humble activity of washing up can enable thinking about shapes and textures

ACTIVITIES FOR PARENTS

Shape and size

Understanding shape and size is something that you do when you park a car or try to fit groceries into a bag. While shapes and sizes are usually associated with mathematics, they are also important when it comes to literacy.

Children have to be able to recognise different shapes of letters and eventually link them to sounds. There are plenty of activities that you can do at home with all ages of children to help them enjoy and discover shape and size. Here are some activities to try.

JUST A SPOONFUL

From six months

Even babies can begin to explore shape and sizes using their hands and mouths. One of the ways in which you can help your baby is to look out for three spoons of different sizes to hold, feel and suck.

Look out for a metal teaspoon as well as a small wooden spoon. You could also give your child the spoon you are using to wean them. This can help babies get used to the feel of the spoon in their mouth. Talk to your child as they hold and touch each spoon. Expect too that the spoons will be dropped!

How this activity helps your child

Hand co-ordination: Holding spoons and also moving them towards the mouth will help your child's hand co-ordination.

Texture: By touching plastic, wood and metal, your child is learning about textures.

Mathematics: Your baby is learning about size, shape and weight.

What next?

You could look out for three other objects for your baby to play with, such as balls of different sizes.

When choosing objects, always think about whether they could be choking hazards.

STACKING UP

From 15 months

Toddlers love helping to stack things but also to knock them down. Look out for four or five metal tins such as biscuit or cake tins. Start off by putting one tin on top of the other. See if your child will help you do the next one. Expect that when you have finished, your child will swipe the tower down. Repeat this activity with your child and start making comments such as 'all fall down' when the tower is knocked over.

How this activity helps your child

Language development: If you repeat phrases such as 'another one' or 'all fall down', your child will learn the meaning of words.

Physical skills: Picking up, moving and stacking tins helps your child's strength and co-ordination.

Confidence: By being able to exert control over objects, your child will gain in confidence.

What next?

Build other small towers together with other objects such as cushions, wooden blocks and empty boxes.

IN THE POST

From two years

A classic toy to help children learn about shape is the shape sorter. While these are popular, two-year-olds love posting shapes on a much larger scale.

Look out for a tube such as the ones that some savoury snacks are packaged in, or a poster tube. Then choose some objects such as cars or building blocks of different sizes, some of which will be too big to drop down the tube. Hold the tube and see if your child is interested in posting objects down it. Make ➤



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comments about what your child is doing.

How this activity helps your child

Hand-eye co-ordination: Posting shapes is great for helping your child to co-ordinate their hand movements.

Vocabulary: You can talk to your child about the size and shape of the objects that are being posted.

Mathematics: Your child will learn to work out what size of objects will and won't fit through the tube. This is applied mathematics!

What next?

Make a simple post box using a cardboard box and cutting out a thin slit. Watch as your child works out what will and won't fit.

ON A PLATE

From two-and-a-half years

Mealtimes can be a useful opportunity for children to learn about size and shape. Creating new ways for children to look at their food can also be a wonderful distraction for fussy eaters.

Try putting out food in mathematical ways – for example, a carrot chopped into three different lengths or a slice of bread cut into different shapes such as a circle, square and triangle. See if your child notices the differences between them. You could also comment as they are eaten – for example, 'The triangle has gone!' or 'The smallest slice of banana has disappeared!'

How this activity helps your child

Hand-eye co-ordination:

Mealtimes help children to practise their hand-eye co-ordination, especially if they are using forks and spoons.

Vocabulary: Draw your child's attention to different sizes, colours and shapes of food on their plate.



Social development: Making mealtimes pleasurable helps children's social development and so this can be a useful strategy.

What next?

Encourage your child to prepare food with you. They might like to find ways of arranging food ready to be served.

PUZZLING!

From three years

It may seem strange, but the traditional jigsaw puzzle is great for helping your child to learn about shapes and sizes. Start by choosing a jigsaw that will probably be too easy for your child. This way your child will be successful and so be keen to try more challenging jigsaws later.

Guide your child only if needed as they will learn more by doing the thinking and the trying. Congratulate your child when they have finished.

How this activity helps your child

Literacy: There is a link between jigsaws and learning to read. This is because letters are shapes.

Problem solving: Learning to work out where the pieces in a jigsaw go helps children's problem solving.

Mathematics: Your child is learning to use shapes in order to solve problems.

What next?

Over time, look for jigsaw puzzles with more pieces. Start to teach your child to start with the corners and also to refer to the picture.

BITS AND PIECES

From four years

Perhaps you remember as a child having fun sticking things together. This is a fantastic way for children to learn at first-hand about shape and size. It is also very early engineering!

Instead of throwing away packaging such as small cardboard boxes or plastic tubs, put them to one side. Look out too for some masking tape as this is easy for children to rip and stick.

Put out your collection of bits and pieces as well as some markers and some paper. Take the lead and start joining some pieces together. Your child might either want to join you or do one alone. Don't worry about what the item looks like – just enjoy the fun of being creative.

How this activity helps your child

Hand-eye co-ordination: Junk modelling requires a range of hand movements, skills and precision.

Problem solving: By finding ways of building and sticking shapes together, your child will learn early problem solving.

Emotional development:

Children get a great sense of achievement when they make their own models.

What next?

Look out for a wider range of materials and encourage your child to experiment. You could also bring out the paint if you are keen!