

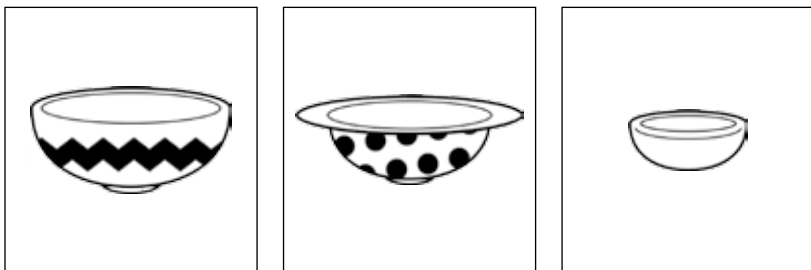
Using and applying mathematics

How many?

- Use developing mathematical ideas and methods to solve practical problems
- Match sets of objects to numerals that represent the number of objects

What you need: Resource sheet 1

Cut out and colour pictures from resource sheet 1 (use more than one copy so that you have plenty of cards). Make sets of objects: a set of 4 spoons, a set of 3 bowls, a set of 5 chairs, and so on. Children find the correct wooden number to match the set. Ask them how they can check their work.



Which bear?

- Use developing mathematical ideas and methods to solve practical problems
- Sort objects, making choices and justifying decisions

What you need: Miniature objects in three sizes

Put out sets of miniature objects in three sizes: for example, bowls, cups, hats, shoes, doll's-house beds, boxes, all muddled up. The objects do not all need to relate to the story, but must be in three obviously different sizes. Explain that the three bears have moved to a new house and that all of their things have been mixed up in the removal lorry. Ask the children to work out which things belong to which bears.



Making it easier

Use sets with fewer objects in them. At snack time, count real plates (or cups or chairs) with the children and help them find the numeral to match the set.

Making it harder

Children sort the cards themselves and find a way of recording what they have done. Talk to them about the challenge and ask them to explain their ideas.

Making it easier

Use only a large and a small bear and make sure that the sorting objects are clearly either large or small.

Making it harder

Include objects that are not in sets of three: for example, one bottle or two chairs. Ask the children to find a way to deal with these.

Breakfast time

- Sort objects, making choices and justifying decisions
- Describe solutions to practical problems, drawing on experience, talking about their own ideas, methods and choices
- Use developing mathematical ideas and methods to solve practical problems

What you need: Three different-sized bears, role-play kitchen equipment, play food; large piece of paper

Sit three bears of different sizes at a table in the home corner and explain that it is breakfast time. Children choose the correct things from a box of role-play equipment to set the table. How many of each item will they need and who will need the biggest/smallest things? Use play food and ask the children how many eggs or slices of toast they need so that each bear has one (or two or three ...).



Making patterns

- Use developing mathematical ideas and methods to solve practical problems
- Talk about, recognise and recreate simple patterns

What you need: Resource sheet 1

Prepare some linear patterns using two kinds of picture from resource sheet 1 (use multiple copies): for example, bowl, chair, bowl, chair; spoon, spoon, bowl, spoon, spoon, bowl ... Children predict what comes next in the pattern. Ask them how they know.

Children then use the picture cards to make their own patterns.

Making it easier

Draw around the objects on a large piece of paper (the 'table cloth') before the session. Children match the objects to the shapes.

Making it harder

Get Goldilocks to set the table incorrectly and ask the children to correct what she has done.

Making it easier

Start by working with the children to make simple patterns using real objects such as cup, plate, cup, plate ...

Making it harder

Make more complex patterns such as ABC or AABC.

Children start off patterns for their friends to continue.