

Over the next few days and weeks your child will be learning about surface area. S/he needs to know the language associated with surface area – area, surface, squares, shapes, estimate, measure, maths book, table, stamps, playing cards, tiler, carpet tiles, room, kennel, patio, shed, lawn, flowerbed, etc.

Measuring a playing card

Give your child some coins and a playing card. Ask your child to estimate and then measure how many coins will be needed to cover the surface area of the card. It doesn't matter that the coins will leave slight gaps in the measurement.

Note: Your child may not need an exact amount of coins. Encourage him/her to always round up if part of a coin is required in the measurement.

Extension 1: Try measuring the card with different denominations of coins. Ask your child to discuss how many more/fewer 20c coins were needed to cover the playing card than 10c coins. Ask your child to give reasons to explain his/her answer.

Extension 2: Now give your child some stamps/cubes/counters, etc. and ask him/her to carry out the exercise again.

Measuring a book

Give your child a pack of playing cards. Ask him/her to measure how many cards are needed to cover the surface area of a maths book/English book/an A4 sheet. Encourage your child to round up if part of a card is required in the measurement.

Measuring a table

Give your child some birthday or Christmas cards. Ask him/her to estimate and measure the surface area of the kitchen table using the birthday or Christmas cards. Ask your child to record his/her estimate and measure on a sheet of paper.

Now ask your child to estimate and measure how many playing cards will be needed to cover the surface of the same table.

Extension: Ask your child to talk about how many more/fewer playing cards or birthday and Christmas cards were needed to cover the table. Ask your child which of the three types of card were best to cover the table and to explain why. For example: *The Christmas cards were best because I had more of them. The birthday cards were best because they were bigger and so I needed*

to use fewer of them. The playing cards were much better because they were all the same size and so I got a more accurate measurement.

Measuring at home

Give your child some A4 sheets of paper. Ask him/her to measure the surface area of a mat in the house using the sheets of paper.

Extension 1: Ask your child to measure the surface area of his/her bed using the A4 sheets of paper.

Extension 2: Ask your child to measure the surface area of the kitchen/bedroom/garage/bathroom/shower floor using the A4 sheets of paper.

Measuring with small squares

Ask your child to divide an A4 sheet of paper (any paper will do) into small squares of equal area – 30cm x 21cm would be about right. Your child does not need to know about square centimetres at this stage. S/he only needs to deal in small squares to help him/her grasp the concept of surface area. Ask your child to cut up the A4 sheet into the small squares. This will also help his/her hand/eye coordination. Advise your child to be careful when using a scissors. It would be beneficial if you did some of the cutting at the beginning as an example.



A4 sheet of paper

When all the squares are cut out, ask your child to estimate and measure the surface area of a playing card.

Extension: Do a similar activity to find the surface area of a birthday card/Christmas card/small kitchen tile/carpet tile/bathroom tile, etc. This is good preparatory work for finding surface area in square centimetres, which your child will do in Third and Fourth class.