

## Games and ideas for maths at home

Key Stage 2 (Years 3 to 6)

### Number bonds

Number bonds are key pairs of numbers which help us with our calculating. Children first learn number bonds to 10 (e.g. 3+7), and to 20 (e.g. 12+8). In KS2 children learn other number bonds such as pairs that make 100 (e.g. 23+77) and decimals that make 1. (e.g. 0.6+0.4).

#### You could try:

- Finding pairs of numbers that make 100 e.g. 23+77, 35+65, 82+18. Then asking the child "What do you notice?" Looking at these pairs the units add to 10 and the tens make 90. 23+77: 3+7 = 10 and 20+70=90.
- Making cards with your child for the number bonds e.g. 0.0, 0.1, 0.2 ...0.9, 1.0, then playing matching games and memory games with them.

### Starting to learn multiplication facts

Children begin by learning their 2s, 5s and 10s, then their 3s and 4s, followed by their 6s, 8s, (as double the 3s and 4s), 7s and 9s. By the end of Year 4 or going into Year 5 many children are fairly confident with these. This supports other areas of maths and making connections: E.g.  $7 \times 4 = 28$ , so  $70 \times 4 = 280$ , or  $7 \times 0.4 = 2.8$

#### You could try:

- For learning the 3s and 4s, using small object (dried pasta, beads) or drawing pictures to show groups, for example for the 3 x table:

  $1 \times 3 = 3$  (one group of 3 = 3)

  $2 \times 3 = 6$  (two groups of 3 = 6)

  $3 \times 3 = 9$  (three groups of 3 = 9)

This helps children to understand what the multiplication facts mean.

- Once you have made a list of the multiplication facts, you could make a card game:

$$4 \times 3$$

$$12$$

- 1) Making the cards by putting the question on the front and answer on the back:
- 2) Using the cards in order first, and then out of order, to practice remembering the answer on the back.
- 3) Playing games e.g. against a partner - taking turns, or against a clock - how quickly can I remember them?
- 4) Choosing a fact e.g.  $5 \times 3 = 15$  and saying "if I know this I also know....." e.g.  $50 \times 3 = 150$  or  $50 \times 30 = 1500$  or  $0.5 \times 3 = 1.5$

### Learning about 'time', 'handing money' and 'measures'

Other areas of maths where parent support and practice at home is particularly valuable are 'time', 'money' and 'measures'. Children will practice these at school, but there are often plenty of opportunities for parents to support this learning.

#### You could try:

- Noticing the time on the clock and talking about what it says. Talking about how long until something happens. "Dinner will be in 10 minutes, what time will that be?"
- Paying for small items with coins - asking the child to pay and then count the change to check it, talking about the value of each coin.
- When cooking at home, involving the child in looking carefully at the scales and measuring amounts e.g. weight in g or kg, volume in ml or l.

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All of these ideas are intended to be a starting point. They cover ideas for Years 3 to 6, so children don't need to rush through steps. You can discuss these with your child's class teacher to agree what would be appropriate for the child as a next step.