

## Year 5 into Year 6 mathematics:

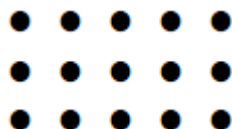
### Number facts

#### Key learning

Recall multiplication facts up to  $10 \times 10$  and use these facts to work out division facts, e.g. knowing  $4 \times 7 = 28$  means we can work out  $28 \div 4$  and  $28 \div 7$ . Multiply pairs of multiples of 10 such as  $20 \times 60$ ,  $30 \times 70$ .

#### Check that your child can:

- use mathematical words for multiplication and division, e.g. 'multiply', 'times', 'groups of', 'lots of', 'product', 'factor', 'divide', 'share', 'equal groups of';
- give multiplication facts quickly and work out division facts to go with them, e.g.  $56 \div 7 = 8$ .



$$5 \times 3 = 15$$

$$3 \times 5 = 15$$

$$15 \div 5 = 3$$

$$15 \div 3 = 5$$

#### ICT Links

Explore *Multiplication Tables*, *Multiplication Array* and *Number Dials* ITPs at

<http://www.standards.dfes.gov.uk/primaryframeworks/library/Mathematics/ICTResources/itps/>

Use the random function on *Multiplication Tables* ITP and hide the answers. Who can jot them all down the quickest?

#### Notes for parents/carers

Children need practice so they are able to recall or work out multiplication and division facts to help them calculate quickly and accurately.

#### Ask questions such as:

- What is 7 multiplied by 8?
- Divide 48 by 6.
- What is the product of 6 and 9?
- How many 4s are there in 64?
- Is 72 divisible by 3? How do you know?
- Is 38 a multiple of 6? How did you decide?
- Is 8 a factor of 67? What information did you use?

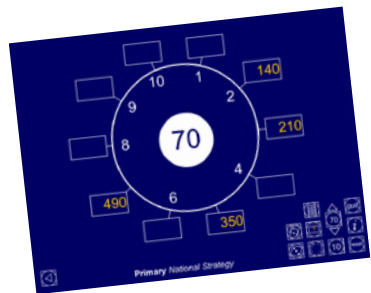
#### Activities to carry out together:

- Look out for arrays while you are shopping in supermarkets. For example: 'There are eight cans of tomatoes next to each other and they are stacked nine cans deep – so how many cans on each layer? What if they are also stacked two cans high – how many altogether?'
- Pick a number, e.g. 36. Between you, how many multiplication and division facts can you think of that involve this number? E.g.  $36 \div 9 = 4$ ;  $40 \times 9 = 360$ ;  $36 \div 6 = 6$ . Take it in turns to add a new fact. How many can you write in three minutes?
- Look for arrays in everyday life – for example the picture opposite. How many windows do you think there are on the wall of the building facing us? What makes you think that?
- Play 'Beat the calculator'. One person works out the answer to a multiplication or division question (similar to those above) with a calculator and one person works them out in their head. Who is the quicker?

## “Let’s talk about maths”

Make use of opportunities to give your child practical experience of mathematics in the home and everyday life, such as:

- working out the cost of groups of items;
- finding out how many items you can buy with a certain amount of money, for example: ‘I have £4.00; a loaf costs 70p; how many can I buy? What change will I have?’
- working out how many children there are in a tournament if there are twenty teams of seven, or how many tables are needed to seat 320 people in groups of eight.



Ask your child which facts they find it difficult to remember. Together, try and find a way to remember.

### Let’s play...

Use a pack of playing cards, removing the picture cards.

#### Activities to carry out together:

- Shuffle the cards. Take it in turns to pull out two cards and multiply them together. Repeat this five times, adding up the scores. Who has scored the most?
- Take two cards to make a two-digit number. Ask your child to take one card to make a single-digit number. Is this number a factor of the two-digit number or is there a remainder when you divide? Use the remainders as your score and repeat five times. What numbers give a big remainder?
- Shuffle the cards and share them equally between you and your child. Each player then turns over their top card and multiplies the two numbers together. The person who is the first to call out the correct answer keeps the two cards. Continue until all the cards have been turned over. The winner is the player with the most cards at the end.