A HANDY WAY TO MULTIPLY!

OBJECTIVE: to multiply by 9

LEARNING LINK: auditory, kinaesthetic

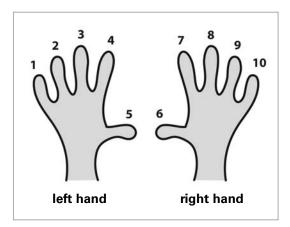
ORGANISATION: whole class and pairs sitting in

two concentric circles

RESOURCES: two hands drawn on the board with the fingers labelled 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 (see below); stickers to write the numbers on and then stick to their fingers (not all children will need this)

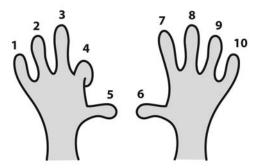
WHAT TO DO

- It is possible to multiply by 9 just using your fingers.
- Hold out your hands or place them face down on the table so that your thumbs point toward one another.
- Visualise that your left little finger stands for 1, the next finger 2, and so on left to right, until your right little finger stands for 0. Look at the drawing on the board.



• Now use your fingers to multiply by 9. Try 4 × 9. Put the finger down that represents 4. All fingers to the left of the down finger represent the tens digit of the answer. You have 3 fingers up, so that makes 30. All the fingers to the right represent the ones digit. You have 6 fingers up, so the answer is 36.

Example: 4 x 9



• Try this for other numbers by playing 'Show me'.

- Sit on chairs in two concentric circles whereby the inner circle faces outwards and the outer circle faces inwards. Everyone is facing a partner.
- Children in the outer circle call out a \times 9 instruction for their partner in the inner circle to show with their hands, for example, *Show* me 5×9 .
- Children in the inner circle then call out an instruction for their outer circle partner.
- ullet After one minute, the outer circle stands and moves one place anti-clockwise to face a new partner. Take turns asking each other \times 9 questions, as before.

NOW TRY THIS

- **1.** Play 'Quick draw nines'. A \times 9 fact will be called out. You have to do this as quickly as you can.
- **2.** A small group of children could demonstrate 'A handy way to multiply' in assembly.

FOUR IN A ROW

OBJECTIVE: to improve ability to multiply up to 6×6

LEARNING LINK: visual, auditory **ORGANISATION:** maths buddies

RESOURCES: a dice; 20 red and 20 blue counters

or cubes; 1×6 number grid (see below)

WHAT TO DO

- This is a game for two players (or double up and play in a group of four as two teams).
- Work with a partner. Each player selects a coloured cube.
- Take turns to roll the dice.
- Cover a multiple of the number thrown. For example if you throw a 5 you can cover 5,10, 15, 20, 25, 30, or 35. You can only cover one number at a time.
- The first player to cover four numbers in a line vertically, horizontally of diagonally is the winner.

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

NOW TRY THIS

- **1.** Now play the game with two dice. Multiply the numbers thrown to cover one of the numbers on the board.
- **2.** Design your own board with no redundant numbers.