

Easy Nines

- You need** a set of digit cards (0–9) a classmate
 a photocopy of the Easy Nines table copymaster
 counters (a different colour for each player)

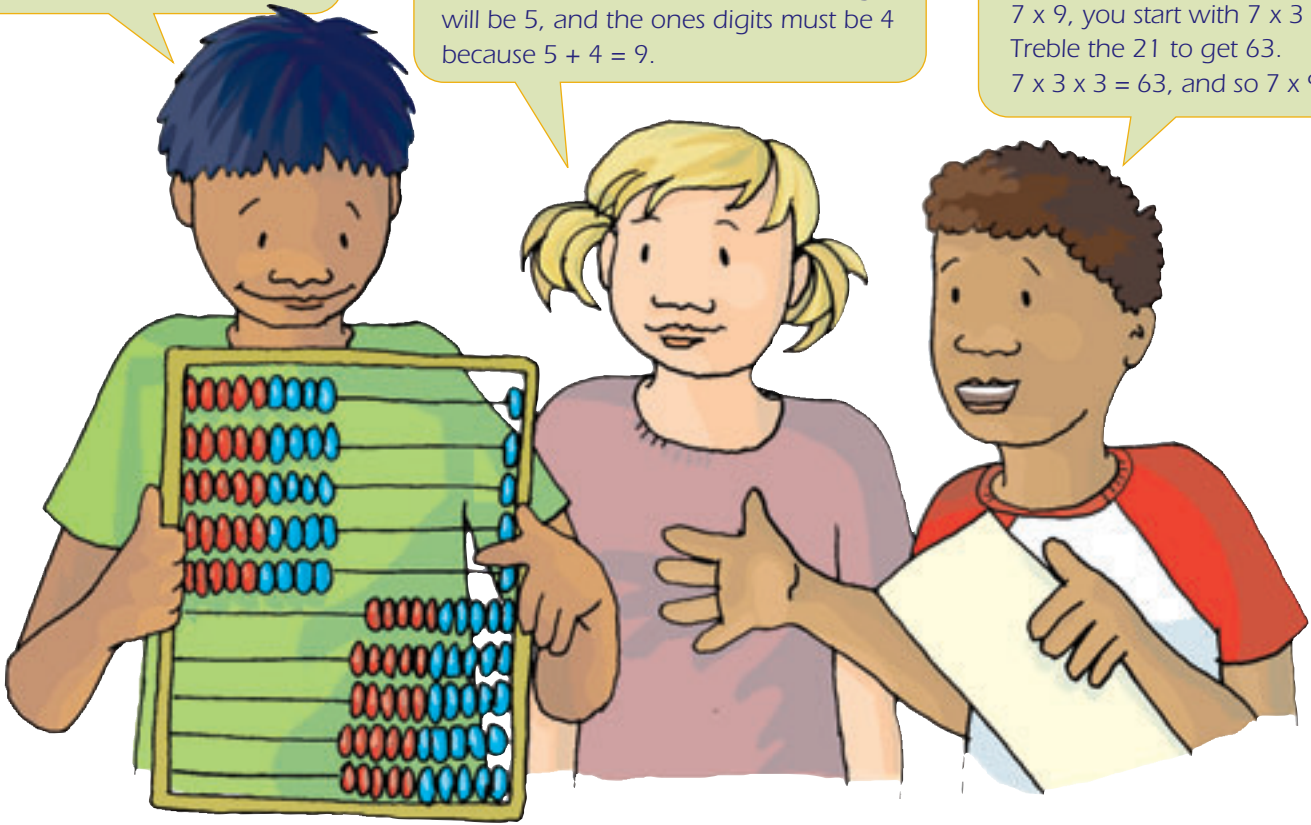
Activity One

Rewi, Caitlin, and Obeda all have different strategies for working out their 9 times table:

I know that $5 \times 10 = 50$, so the answer to 5×9 will be 1 group of 5 less than that.

I've used patterns. The digits in multiples of 9 always add up to 9. 6×9 has to be in the decade below 60 because $6 \times 10 = 60$. That means the tens digit will be 5, and the ones digits must be 4 because $5 + 4 = 9$.

You can work out the 9 times table from the 3 times table. You treble 3 times the number to get 9 times the number. So for 7×9 , you start with $7 \times 3 = 21$. Treble the 21 to get 63. $7 \times 3 \times 3 = 63$, and so $7 \times 9 = 63$.



1. Complete your copy of the Easy Nines table.

	Using my 10 times table	Down a decade and digits adding up to 9	Using my 3 times table	Answer
$6 \times 9 =$				

2. Can you think of another strategy for working out your 9 times table?

Activity Two

1. With a classmate, play the Easy Nines game:

9	54	63	18
45	36	63	0
54	81	72	9
72	0	45	27

- Shuffle the digit cards and place them in a pile face down between you both.
- Take turns to flip over a digit card and multiply the number on that card by 9.
- Cover the answer on the Easy Nines grid with one of your counters.
- If the number you get as your answer is already covered on the grid, you must miss that turn.
- Put the digit cards you have used into a separate pile.
- The first player to get 3 counters in a horizontal, vertical, or diagonal row wins the game.
- If neither of you has 3 counters in a row by the time you have gone through the pile of shuffled digit cards, reshuffle the cards and use them again.
- If neither of you has 3 counters in a row once the grid is full, then the game is a draw.

2. Now use your 9 times table to help you complete these equations:

- a. $4 \times 9 =$ b. $7 \times 9 =$
 c. $10 \times 9 =$ d. $19 \times 5 =$
 e. $49 \times 8 =$ f. $29 \times 6 =$
 g. $81 \div 9 =$ h. $63 \div 9 =$
 i. $\square \div 9 = 6$



I know that $10 \times 3 = 30$
and $9 \times 3 = 27$.
So $19 \times 3 = 57$.

