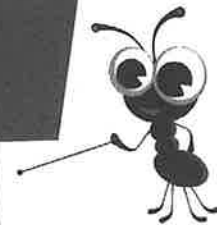


Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Multiplication: Introducing the expanded written method



Use the expanded written method to calculate  $TO \times O$

**Challenge 1**

These calculations are incomplete. Write the missing digits.

a  $3 \times 9 = 2 \square$

b  $4 \times \square = 28$

c  $\square \times 8 = 32$

d  $\square \times 4 = 16$

e  $7 \times 5 = \square 5$

f  $6 \times \square = 24$

g  $8 \times 8 = \square 4$

h  $6 \times \square = \square 8$

i  $1 \square \times \square = 48$

**Challenge 2**

Approximate the answer to each calculation.

**Example**  $63 \times 8 \rightarrow 60 \times 8 = 480$

a  $45 \times 4 \rightarrow$

b  $96 \times 5 \rightarrow$

c  $37 \times 3 \rightarrow$

d  $68 \times 3 \rightarrow$

**Challenge 3**

Find the answers to the calculations above using the expanded written method of multiplication. Check your estimate is close to your answer.



**You will need:**

- squared paper

**Example**

	H	T	O	
		6	3	
$\times$			8	
		2	4	$(3 \times 8)$
	4	8	0	$(60 \times 8)$
	5	0	4	
	1			



Choose two calculations. Ask an adult to show you how they would work out the answers to the calculations. Explain to an adult how you worked them out. Discuss how your methods are similar or different.