

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

# Multiplication HTO x O using the expanded written method

Use the expanded written method to calculate multiplication of HTO x O

**Challenge 1**

These calculations are incomplete. Fill in the missing digits.

**You will need:**

- squared paper

1  $4 \times 9 = 3 \square$

2  $7 \times 6 = \square 2$

3  $1 \square \times \square = 72$

4  $4 \times \square = 28$

5  $6 \times \square = 54$

6  $9 \times \square = 4 \square$

7  $\square \times 8 = 48$

8  $8 \times 8 = \square 4$

9  $\square \times 7 = 6 \square$

**Challenges 2,3**

Approximate the answer to each calculation.

**Example**  $463 \times 8 \rightarrow 500 \times 8 = 4000$

1  $389 \times 4 \rightarrow$  

2  $689 \times 7 \rightarrow$  

3  $956 \times 9 \rightarrow$  

4  $765 \times 8 \rightarrow$  

5  $367 \times 6 \rightarrow$  

6  $693 \times 9 \rightarrow$  

**Challenge 3**

1 Use the expanded written method to work out the answer to each calculation in Challenges 2,3 on squared paper. Check that your estimate is close to your answer.

**Example**

	Th	H	T	O	
		4	6	3	
x				8	
			2	4	(3 x 8)
		4	8	0	(60 x 8)
	3	2	0	0	(400 x 8)
	3	7	0	4	
					1

Estimate was 4000, so the answer is close.

2 Choose two of the calculations in Challenges 2,3 and write a word problem for each on the back of this sheet.



Choose two of the calculations in Challenges 2,3. Ask someone at home to show you how they would estimate the answer to the calculations. Discuss how your methods are similar or different.