### Homework/Extension Step 5: Multiply 4-Digits by 2-Digits

Teaching note: We have included grids for column multiplication and recommend that this resource is printed in colour or greyscale.

### National Curriculum Objectives:

Mathematics Year 5: (5C6a) <u>Multiply and divide numbers mentally drawing upon known</u> facts

Mathematics Year 5: (5C7a) <u>Multiply numbers up to 4 digits by a one- or two-digit number</u> using a formal written method, including long multiplication for two-digit numbers

## Differentiation:

CLASSROOM Secrets

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Solve the calculations and state which gives the larger answer by using the fully expanded method with no exchanges.

**Expected** Solve the calculations and state which gives the larger answer by using a formal multiplication method including exchanges.

Greater Depth Solve the calculations by finding the missing numbers and state which gives the larger answer by using a formal multiplication method including exchanges.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** State whether a statement is correct by solving a calculation using the fully expanded method with no exchanges.

**Expected** State whether a statement is correct by solving a calculation using a formal multiplication method including exchanges.

Greater Depth State whether a statement is correct by finding the missing numbers in a multiplication calculation which includes exchanges.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Solve the calculations and then explain which is the odd one out. Calculations with no exchanges.

Expected Solve the calculations and then explain which is the odd one out. Calculations include exchanges.

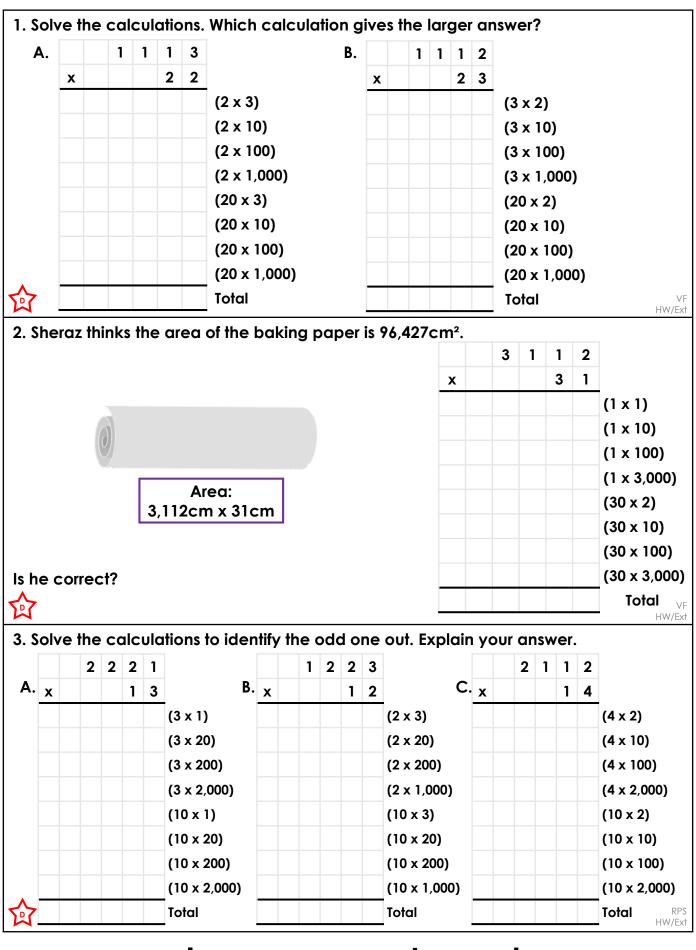
Greater Depth Create and solve three multiplication calculations based on an odd one out statement. Calculations can include exchanges.

More <u>Year 5 Multiplication and Division</u> resources.

Did you like this resource? Don't forget to <u>review</u> it on our website.



© Classroom Secrets Limited 2019 Homework/Extension – Multiply 4-Digits by 2-Digits – Teaching Information



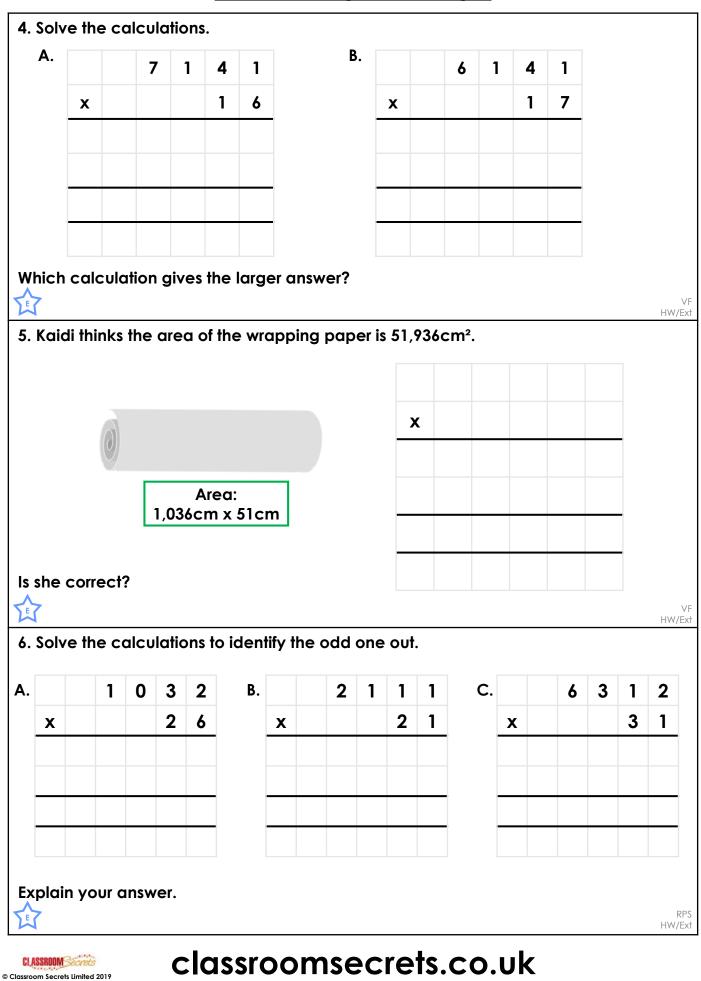
Multiply 4-Digits by 2-Digits

# classroomsecrets.co.uk

CLASSROOM Secrets © Classroom Secrets Limited 2019

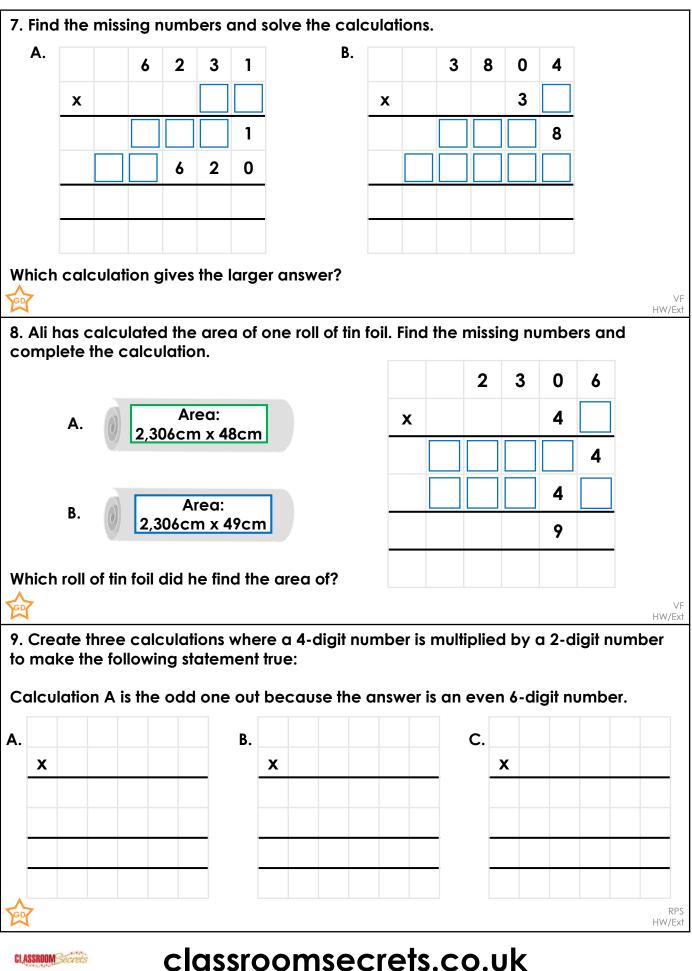
Homework/Extension – Multiply 4-Digits by 2-Digits – Year 5 Developing

### Multiply 4-Digits by 2-Digits



Homework/Extension – Multiply 4-Digits by 2-Digits – Year 5 Expected





© Classroom Secrets Limited 2019 Homework/Extension – Multiply 4-Digits by 2-Digits – Year 5 Greater Depth

#### Homework/Extension Multiply 4-Digits by 2-Digits

#### Developing

1. A. 1,113 x 22 = 24,486; B. 1,112 x 23 = 25,576.Calculation B has the larger answer. 2. No, Sheraz is incorrect. The correct answer is 96,472cm<sup>2</sup>.

**3.** A. 28,873; B. 14,676; C. 29,568. Various explanations for which is the odd one out, for example: A is the odd one out because the answer is an odd number. The answers to B and C are both even numbers.

#### **Expected**

4. A. 7,141 x 16 = 114,256; B. 6,141 x 17 = 104,397. Calculation A has the larger answer. 5. No, Kaidi is incorrect. The correct answer is 52,836 cm<sup>2</sup>.

6. A. 26,832; B. 44,331; C. 195,672. Various explanations for which is the odd one out, for example: C is the odd one out because the answer is a 6-digit number. The answers to A and B are both 5-digit numbers.

#### Greater Depth

7. A. 6,231 x 21 = 130,851; B. 3,804 x 32 = 121,728. Calculation A has the larger answer. 8.

		2	3	0	6
x				4	9
	2	0 2	7	<b>5</b>	4
	9	2	2	4	0
1	1	2	9	9	4

Ali found the area of roll B.

9. Various answers where calculation A has an even 6-digit number as the answer, for example: A. 4,427 x 34 = 150,518; B. 4,427 x 13 = 57,551; C. 4,427 x 15 = 66,405, A. 4,421 x 34 = 150, 314; B. 4,421 x 17 = 75,157; C. 4,421 x 21 = 92,841, A. 5,781 x 18 = 104,058; B. 5,781 x 11 = 63,591; C. 5,781 x 13 = 75,153



classroomsecrets.co.uk

Homework/Extension – Multiply 4-Digits by 2-Digits ANSWERS