**Multiplication and Division**

**Problem solving and reasoning questions**

Does 2340 x 8 give the same answer as 4320 x 4?

Explain how you are certain that your answer is correct.

Choose a strategy for each of these three multiplications.

Explain why it is not sensible to use the same method for all three.

1. 340 x 5 =
2. 421 x 7 =
3. 350 x 9 =

x

Using the digits 3, 5, 6, 7 and 9, how close can you get to 20,000?

**Multiplication and Division Unit 2**

**Problem solving and reasoning answers**

Does 2340 x 8 give the same answer as 4320 x 4?

Explain how you are certain that your answer is correct.

Answers are 18,720 and 17,280 respectively.

You need to double 2340 and multiply by 4 to get the same answer as 2340 x 8; 4680 x 4 = 18,720.

Choose a strategy for each of these three multiplications.

Explain why it is not sensible to use the same method for all three.

(i) 340 x 5 = 1700 – Solve by partitioning: multiply 300 by 5, then 40 by 5, and add.

(ii) 421 x 7 = 2947 – Solve as short multiplication.

(iii) 350 x 9 = 3150 – Multiply by 10, then subtract 350.

Other strategies possible, these are examples. The important thing is that children make a sensible choice based upon reviewing the numbers to be multiplied.

x

Using the digits 3, 5, 6, 7 and 9, how close can you get to 20,000?

6597 x 3 = 19,791, by trial and improvement.