

Year 6**Multiplying and Dividing Decimals (10, 100, 1000)****SATs Strategy Reminder**

- Digits shift **left** for multiplication ($\times$) and **right** for division ($\div$).
- Keep your eyes peeled for multi-step balance equations where **both** sides of the equals sign contain an operation.
- Decimal places can extend up to 3 d.p. (tenths, hundredths, thousandths).

Part 1: Advanced Arithmetic Warm-up

Complete the calculations below.

1. $0.004 \times 1000 = \underline{\hspace{2cm}}$

2. $70.13 \div 100 = \underline{\hspace{2cm}}$

3. $6.092 \times 100 = \underline{\hspace{2cm}}$

4. $32 \div 1000 = \underline{\hspace{2cm}}$

5. $0.805 \times 10 = \underline{\hspace{2cm}}$

Part 2: SATs-Style Multi-Step & Missing Numbers

Fill in the missing values to make the equations correct.

6. Write the missing number.

$$0.07 \times 100 = 700 \div \underline{\hspace{2cm}}$$

7. Write the missing number.

$$\underline{\hspace{2cm}} \times 100 = 40.5$$

8. Write the missing operations ($\times$ or $\div$) inside the boxes.

$$9.1 \square 10 \square 10 = 0.091$$

9. Write the missing number.

$$61.8 \div 10 = 6180 \div \underline{\hspace{2cm}}$$

Continued ...

Year 6**Multiplying and Dividing Decimals (10, 100, 1000)****Part 3: SATs-Style Comparison & Sorting**

10. Write the correct symbol $<$, $>$, or $=$, in the circle to make each statement correct.

a) 0.045×1000 ☐ $450 \div 10$

b) $72.3 \div 100$ ☐ 0.723×10

c) 0.009×100 ☐ $90 \div 1000$

Part 4: Real-World SATs Context & Reasoning

Show your method clearly for these problems.

11. A large container holds 3.5 litres of water. The water is poured equally into 100 miniature sample vials. How many millilitres (ml) of water are in each vial? (*Hint: 1 litre = 1000ml*)

Working out space: _____

Answer: __ ml

12. A builder orders 1,000 heavy-duty metal bolts. The total weight of the delivery crate is 24.8 kg. The empty wooden crate itself weighs exactly 4.8 kg. What is the mass of one single bolt in kilograms?

Working out space:

Answer: __ kg

13. Amina says:

"If a number is multiplied by 1000 and then divided by 100, the answer will always be 10 times the original number."

Is Amina correct?

Explanation:
