

SCORE
A

Numbers

With Classified
answer book

8

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8- Multiplying and Dividing by the Power of 10

1. Multiply each number by 10^2

(a) 7.67

(b) 0.364

(c) 38.3

(d) 4.7002 (e) 0.093

2. Divide each number by 10^2

(a) 978

(b) 15.6

(c) 3.48

(d) 0.574

(e) 1354

3. Multiply each number by 10^{-3}

(a) 758

(b) 7029

(c) 64.3

(d) 9.106

(e) 0.68

4. Divide each number by 10^{-3}

(a) 1.358

(b) 0.684

(c) 0.0685

(d) 1.57

(e) 358

5. Calculate

a) 34×10^{-3}

d) 0.064×10^{-3}

b) 7.94×10^{-2}

e) $79.8 / 10^{-1}$

c) 57.6×10^2

f) 543×10^{-2}

6. Use these mathematical terms to complete the statements below.

cube cube root square square root

10 is the of 100

144 is the of 12

5 is the of 125

7. Complete the calculations.

a) $147 \div 10 =$

b) $3,200 \div 10 =$

c) $147 \div 100 =$

d) $3,200 \div 100 =$

8. Put a ring around the number that is equivalent to 10^1

10^{-2}

10^{-1}

100

101

9. Calculate:

a) $34 \div 10^3 =$

b) $7.5 \times 10^{-2} =$

c) $0.062 \div 10^{-1} =$

10. (a) Work out 942×10

(b) Write down the value of the digit 4 in the answer to (a)

11. Write down the value of the digit 3 in the answer 931×100

12. Write down the value of the digit 5 in the answer $125000 \div 100$

13. Fill in the missing numbers

(a) $85 \times \boxed{} = 8500$

(b) $\boxed{} \times 1000 = 400$

(c) $\boxed{} \times 10 = 457.1$

(d) $1900 \div \boxed{} = 19$

(e) $\boxed{} \div 10 = 0.05$

(f) $94000 \div \boxed{} = 94$

14. Shown below are some questions and answers.

Match the correct questions and answers.
The first one has been completed for you.

$200 \div 10$ 0.2

$0.2 \div 10$ 20

0.2×10 2

$2 \div 10$ 0.02

$2 \div 1000$ 0.002

15. Complete this statement.

$= 0.01 \div 72.9 \dots\dots\dots \frac{0.1}{\div}$

16. Work out twenty thousand divided by one million

17. Complete each statement:

a) $7 \times 10 \dots = 70$

d) $700 \div 10^3 = 0.007 \dots \dots \dots$

b) $0.7 \div 10^{-3} = \dots \dots$

f) $\dots \dots \dots 700 = 0.007 \dots \dots \dots$

c) $0.07 \div 10^{-4} = 7 \times \dots \dots$

e) $70 \div 10^{-2} = \dots \dots \times 10^{-2}$

18. A coffee shop sells cups of coffee in 0.4 litre cups.
In one day they sell 10000 cups of coffee.

How many litres of coffee do they sell?

19. Amir has multiplied 3.8 by 1,000

a) What mistake has Amir made?

The answer is 3.8000

b) Work out the correct answer.

$3.8 \times 1,000 =$

20. Carly needs 42000 blocks of Lego to build a large castle.

The lego blocks are sold in boxes of 100.

How many boxes of lego does she need?

20. An egg box can hold 10 eggs.
How many eggs are there in 45 full boxes?

21. Jacob is paid £10 an hour.
His monthly pay for October was £890
How many hours did Jacob work in October?

22. Complete the calculations.

a) $7.7 \times \boxed{} = 770$

e) $8.032 \times \boxed{} = 80.32$

b) $\boxed{} \times 10 = 1,950$

f) $\boxed{} \times 18.3 = 1,830$

c) $11.5 \times \boxed{} = 115$

g) $195.32 \times \boxed{} = 1,953.2$

d) $\boxed{} \times 11.5 = 11,500$

h) $\boxed{} \times 1,000 = 7,200$

23. When you multiply a number by 10^{-4} , is the answer larger or smaller than when you multiply the number by 10^{-5} ?

24. If you divide a number by 10^{-4} , is the answer larger or smaller than when you divide the number by 10^{-5} ?

25. Tommy is 1.4 m tall.

A tree is 10 times as tall as Tommy.

A building is 100 times as tall as Tommy.

a) How tall is the tree?

 m

b) How much taller is the building than the tree?

 m

26. Match the multiplications to the descriptions.

10×10

multiply by 10

$10 \times 10 \times 10$

100×10

multiply by 100

10×100

10×1

multiply by 1,000

27. Use your knowledge of measure to work out the answers.

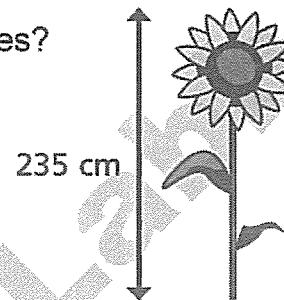
a) What is the mass of the box in kilograms?

$$\boxed{} \div \boxed{} = \boxed{}$$



b) What is the height of the sunflower in metres?

$$\boxed{} \div \boxed{} = \boxed{}$$



c) What is the amount of juice in litres?

$$\boxed{} \div \boxed{} = \boxed{}$$

