

NUMBER

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Whole Number Revision

- | | | | | | |
|----|----------------|-----|----|------------------|-------|
| 1 | $234 + 28$ | 262 | 11 | 23×10 | 230 |
| 2 | $9 + 456 + 87$ | 552 | 12 | 3×100 | 300 |
| 3 | $67 - 32$ | 35 | 13 | 43×1000 | 43000 |
| 4 | $83 - 39$ | 44 | 14 | 300×100 | 30000 |
| 5 | $415 - 187$ | 228 | 15 | 203×10 | 2030 |
| 6 | 37×6 | 222 | 16 | $200 \div 10$ | 20 |
| 7 | 43×7 | 301 | 17 | $3000 \div 1000$ | 3 |
| 8 | $45 \div 5$ | 9 | 18 | $2300 \div 100$ | 23 |
| 9 | $36 \div 3$ | 12 | 19 | $340 \div 10$ | 34 |
| 10 | $100 \div 20$ | 5 | 20 | $30000 \div 100$ | 300 |

General Number Revision

- 1 Which of these numbers are odd? 23, 456, 4021, 8, 89, 98
- 2 Which of these numbers are even? 256, 6, 1, 13, 1941, 808
- 3 What is 3^2 ? 9
- 4 What is the $\sqrt{25}$? 5
- 5 Write three thousand seven hundred and eight in figures 3708
- 6 Write 4020 in words Four thousand and twenty
- 7 What is the place value of the 2 in these numbers?

a) 203	b) 3420	c) 302	d) 2003
100	10	1	1000
- 8 a) Is 12 a multiple of 3? Yes
 $4 \times 3 = 12$
- b) Is 2 a factor of 20? Yes
 $20 \div 2 = 10$

①

Number Activity Sheet

Addition

- 1) $34 + 45$ 79
2) $76 + 8 + 234$ 318
3) $32 + 18 + 7$ 57
4) $46 + 1023 + 345$ 1414

Times

- 9) 4×5 20
10) 6×7 42
11) 12×2 24
12) 4×9 36

Subtraction

- 5) $16 - 9$ 7
6) $57 - 32$ 25
7) $53 - 28$ 25
8) $126 - 78$ 48

Division

- 13) $30 \div 5$ 6
14) $16 \div 2$ 8
15) $24 \div 6$ 4
16) $21 \div 9$ 2 r 3 2.3

Odd or Even – Write the question number and then put odd or even

- 17) 3647 18) 36272 19) 373738 20) 281
 O E E O

Which number is bigger – Write down the biggest number of the pair

- 21) 101 or 110 22) 0.3 or $\frac{1}{2}$ 23) 0.34 or 0.4 24) $\frac{1}{4}$ or $\frac{1}{3}$

Negative Numbers

- 25) $-3 + 5$ 26) $3 - 7$ 27) $-3 - 4$ 28) $-8 + 6$
 2 -4 -7 -2

And finally

- 29) 37×6 30) 48×23
 222 1104

②

Number Warm Up

- | | | | | | |
|---|-----------|----|----|---------------|----|
| 1 | $13 + 9$ | 22 | 6 | 5×6 | 30 |
| 2 | $14 + 17$ | 31 | 7 | 8×3 | 24 |
| 3 | $17 - 6$ | 11 | 8 | 14×6 | 84 |
| 4 | $23 - 9$ | 14 | 9 | $12 \div 3$ | 4 |
| 5 | $34 - 19$ | 15 | 10 | $24 \div 6$ | 4 |

Negative Numbers

- | | | | | | |
|----|----------|----|----|-----------|---------------|
| 11 | $-2 + 5$ | 3 | 14 | $5 - 7$ | -2 |
| 12 | $-6 - 1$ | -7 | 15 | $-2 + -3$ | $-2 - 3 = -5$ |
| 13 | $-7 + 2$ | -5 | 16 | $-3 - -2$ | $-3 + 2 = -1$ |

Time

- | | | | | | |
|----|-----------------------|---------|----|--------------------------|----------|
| 17 | 2 am in 24 hour clock | 02:00 | 21 | Midnight in 24 hour time | 00:00 |
| 18 | 2 pm in 24 hour clock | 14:00 | 22 | Midnight in normal time | 12:00 am |
| 19 | 15:30 in normal time | 3:30 pm | 23 | Midday in 24 hour time | 12:00 |
| 20 | 20:15 in normal time | 8:15 pm | 24 | Midday in normal time | 12 pm |

Money

- | | | | | | |
|----|--------------------|-------|----|--------------------|-------|
| 25 | $£5 - 21p$ | £4.79 | 28 | $£1.25 + 89p + 7p$ | £2.21 |
| 26 | $£5 - £1.24$ | £3.76 | 29 | $£20 - £17.40$ | £2.60 |
| 27 | $£5 - £1.20 - 37p$ | £3.43 | 30 | $£10 - £5.60$ | £4.40 |

3

Multi-step Problems

1. $3 \times 19 = 57p$ $2 \times 32 = 64p$
 $57 + 64 = 121p = \pounds 1.21$
 $\pounds 2 - 1.21 = 79p = \pounds 0.79.$

9. $25\% \text{ of } 40 = 10$
 $40 - 10 = \pounds 30$

10. $50\% \text{ of } 400 = 200$
 $400 + 200 = \pounds 600$

2. $65 \div 5 = 13$

3. $10 \times 10 = 100p$ $\pounds 1.60 - \pounds 1 = 60p.$
 $60 \div 5 = 12$ 12 minutes of calls.

4. $50 + 20 + 30 + 2 \times 40 = \pounds 1.80$
 No, not enough stamps
 $\pounds 2.20 - \pounds 1.80 = 40p$ short.

5. 3 and 8

6. 3:35 pm to 4:30 pm is 55 minutes
 Enough time for 5 games
 $5 \times \pounds 6 = \pounds 30$

7.
$$\begin{array}{r} 3 \text{ min } 45 \\ 2 \text{ min } 8 \\ 2 \text{ min } 20 \\ \hline 7 \text{ min } 73 \end{array}$$
 $73 \text{ secs} = 1 \text{ min } 13 \text{ secs}$
 $7 \text{ min} + 1 \text{ min} + 13 \text{ secs}$
 $= 8 \text{ mins } 13 \text{ secs.}$

$10 \text{ mins} - 8 \text{ mins } 13 \text{ secs} = 1 \text{ min } 47 \text{ secs.}$

8. $a = 15p \times 3 = 45p$
 $b = 8p \times 2 = 16p.$

$c = 45 + 16 = 61p$ $\pounds 1.03 - 61p = 42p.$

$d = 42 \div 7 = 6$

(4)

Addition

- 1) $564 + 63 + 0.58 + 7.2$ 634.78
 2) $£3.57 + £10 + 86p + 9p$ £14.52
 3) $4.5 \text{ m} + 63 \text{ cm} + 38 \text{ mm}$ 5.168 m
 4) $\frac{2}{3} + \frac{3}{4}$ 516.8 cm
 $\frac{8}{12} + \frac{9}{12} = \frac{17}{12}$ 5168 mm

Subtraction

- 5) $562 - 381$ 181
 6) $9.2 - 0.38$ 8.82
 7) $\frac{3}{5} - \frac{1}{2}$ $\frac{6}{10} - \frac{5}{10} = \frac{1}{10}$
 8) $1 \text{ kg} - 50 \text{ g}$
 $1000 - 50 = 950 \text{ g}$
 0.95 kg

Multiplication

- 9) 27×38 1026
 10) 0.4×0.6 0.24
 11) 1.3×0.08 0.104
 12) $\frac{3}{5} \times \frac{1}{2}$ $\frac{3}{10}$

Division

- 13) $456 \div 8$ 57
 14) $29.4 \div 7$ 4.2
 15) $0.468 \div 0.06$ 7.8
 16) $\frac{3}{5} \div \frac{1}{2}$

$$\frac{3}{5} \times \frac{2}{1} = \frac{6}{5}$$

Conversions

- 17) 400 minutes into hours and minutes. 6h 40 min
 18) 3 hours 18 minutes into minutes. 198 min
 19) 2 days and 4 hours into hours. 52 h
 20) 38 hours into days and hours. 1 d 14 h
 21) 1 hour 30 minutes into a decimal. 1.5 hours.
 22) 1.25 hours into hours and minutes. 1 hour 15 min.
 23) $3\frac{2}{5} = \frac{17}{5}$ as a top heavy fraction
 24) $\frac{13}{4} = 3\frac{1}{4}$ as a mixed number fraction
 25) $\frac{3}{8}$ as a decimal. 0.375
 26) 0.24 as a fraction. (cancel if possible) $\frac{24}{100} = \frac{12}{50} = \frac{6}{25}$
 27) 250 cm in metres. 2.5 m
 28) 350 grams in kg. 0.35 kg
 29) 0.5 litres in ml. 500 ml.
 30) 1 m^2 in cm^2 . $1 \text{ m} = 100 \text{ cm}$
 $1 \text{ m}^2 = 100^2 \text{ cm}^2$
 $= 10000 \text{ cm}^2$

Multistep Problem

I buy 3 cans of coke at 38p each, 2 pizzas at £4.85 each and 4 garlic breads. I pay with a £20 note and get £3.68 change. How much is 1 garlic bread?

$$3 \times 38 = \pounds 1.14$$

$$\pounds 5.48 \div 4$$

$$2 \times 4.85 = \pounds 9.70$$

$$\pounds 1.37$$

$$\pounds 10.84$$

$$\pounds 20 - \pounds 3.68 = \pounds 16.32$$

$$\pounds 16.32 - \pounds 10.84 = \pounds 5.48$$

5

1) $582 - 237 = 345$

10) $-2 + 5 = 3$

2) $47 \times 67 = 3149$

11) $-2 - 7 = -9$

12) $-9 + 4 = -5$

3) $2192 \div 8 = 274$

13) $-3 +^{-}5 = -3 - 5 = -8$

14) $-2 -^{-}6 = -2 + 6 = 4$

4) $5 \div 8 = 0.625$

15) $3 \times^{-}4 = -12$

5) $8 \div 5 = 1.6$

16) $^{-}6 \times^{-}2 = 12$

17) $8 \div^{-}2 = -4$

6) $12.4 + 0.98 + 0.07 = 13.45$

18) $-18 \div^{-}3 = 6$

7) $0.4 \times 0.6 = 0.24$

19) $(-4)^2 = -4 \times -4 = 16$

8) $10 \div 0.1 = 100$

20) $5 + 2 \times 3 = 5 + 6 = 11$

9) $8 \times 0.3 = 2.4$

Number Work - NO CALCULATORS ALLOWED

Complete all questions in your exercise book showing all working out.

- 1) 47×6 282 2) $4328 - 2573$ 1755 3) $20336 \div 8$ 2542
 4) $2.8 + 9$ 11.8 5) $12.6 - 3.8$ 8.8 6) 0.2×8 1.6 7) 0.3×0.4 0.12 8) $10 \div 0.5$ 20
 9) $\frac{1}{5} + \frac{3}{5}$ $\frac{4}{5}$ 10) $\frac{3}{4} - \frac{1}{4}$ $\frac{2}{4} = \frac{1}{2}$ (11) $\frac{14}{3} =$ write as mixed number fraction $4\frac{2}{3}$
 12) $4\frac{2}{5} =$ write as a top heavy fraction $22/5$

Negative Numbers

- 13) $-3 + 5$ 2 14) $4 - 7$ -3 15) $-8 - 3$ -11 16) $-11 - 9$ -20
 17) -3×-4 12 18) 5×-7 -35 19) $20 \div -5$ -4 20) $-18 \div -2$ 9

Time - How long is it between these two times?

- 21) 3.40 am and 8.15 am $4\text{h } 35\text{min}$ 22) 9.35am and 14:20 $4\text{h } 45\text{min}$ 23) 9.17 pm and 02:09 $4\text{h } 52\text{m}$
 Symbols 24) $\sqrt{81}$ 9 25) 3^2 9 26) 4^3 64 27) 23% of 200 46 28) 2^5 32

29) Write down all the factors of 24. $1, 2, 3, 4, 6, 8, 12, 24$

30) Write down the first five multiples of 6. $6, 12, 18, 24, 30$

31) Write down the first five prime numbers. $2, 3, 5, 7, 11$

32) Write down the first five square numbers. $1, 4, 9, 16, 25$

33) Write the next three numbers in this sequence. $4, 7, 10, 13, \dots$ What is the rule? $+3$
 $16, 19, 22$

34) Write the next three numbers in this sequence. $15, 8, 1, \dots$ What is the rule? -7
 $-6, -13, -20$

Copy and complete this table, filling in all the gaps.

Food	How many	Price of 1	Total Cost
Chips	6 portions	98p	5.88
Sausages	3	37p	1.11
Fish	3		£7.05
Beans		47p	£1.88
Drinks		48p	£2.88
Total Cost			18.80
Total Cost with 10% discount			16.92

The final bill is split equally between 6 people. How much do they pay each?

$$16.92 \div 6 = \pounds 2.82$$

Number Activities

Without using a calculator work out the answers to the following. Show your working out.

- | | |
|------------------------|------------------------|
| 1) $235 + 67 + 8$ 310 | 6) $441 \div 7$ 63 |
| 2) $357 - 89$ 268 | 7) 0.2×8 1.6 |
| 3) 34×7 238 | 8) 235×6 1410 |
| 4) 72×56 4032 | 9) $2748 \div 6$ 458 |
| 5) $32 \div 4$ 8 | 10) $12 \div 0.5$ 24. |

Write down the next three numbers in each sequence

- | | |
|---------------------------------------|-----------------------------------|
| 11) 3, 7, 11, 15 19, 23, 27 | 13) 13, 9, 5, 1 -3, -7, -11 |
| 12) 0.2, 0.4, 0.6, 0.8 1, 1.2, 1.4 | 14) 1, 2, 4, 8, 16 32, 64, 128 |

Write these numbers in order of size, smallest to largest

- | | |
|--|--|
| 15) 101, 110, 111
101, 110, 111 | 17) 0.1, 0.11, 0.01, 0.101 0.01, 0.1, 0.101, 0.11 |
| 16) 0.2, 0.71, 0.123
0.123, 0.2, 0.71 | 18) 0.672, 0.7, 0.4, 0.401 0.4, 0.401, 0.672, 0.7 |

Negative Numbers

- | | |
|------------------|-------------------|
| 19) $-2 + 5 = 3$ | 21) $-2 - 3 = -5$ |
| 20) $3 - 8 = -5$ | 22) $-7 + 3 = -4$ |

Time

- | | |
|--|--|
| 23) How many seconds in a minute? 60 | 31) How long is it between
9.30 am and 11.15am 1h 45 min |
| 24) How many minutes in an hour? 60 | 32) What time is 1 hour 35
minutes after 10.40am? 12.15 pm |
| 25) How many seconds in an hour? 3600 | 33) What time is 2 hours 25
minutes before 1.15 pm? 10.50 am |
| 26) How many hours in a week? 168 | 34) What is 6pm in 24 hour
clock? 18:00 |
| 27) Write 400 minutes in hours and minutes.
6h 40m. | |
| 28) How many minutes in 2 hours and 35 minutes?
155m | |
| 29) How many minutes in one and a quarter hours?
75 min. | |
| 30) How many minutes in three and three quarter hours?
225 min. | |

Written Methods

Whole Numbers

- 1) $234 + 898$ 1132 2) $467 - 289$ 178
 3) 34×67 2278 4) $3703 \div 7$ 529.

Decimals

- 5) $5.2 + 0.9 + 16$ 22.1
 7) 4.2×0.8 3.36
 9) 3.7×6.2 22.94
 6) $3.7 - 1.8$ 1.9
 8) $44.8 \div 8$ 5.6
 10) $1.71 \div 0.03$ 57

Fractions

- 11) $\frac{1}{4} + \frac{2}{4}$ $\frac{3}{4}$ 12) $\frac{2}{3} + \frac{1}{4} = \frac{11}{12}$
 13) $\frac{3}{5} - \frac{1}{2}$ $\frac{1}{10}$ 14) $\frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$
 15) $\frac{2}{3} \div \frac{4}{5}$ $\frac{10}{12} = \frac{5}{6}$ 16) $2\frac{3}{4} = \frac{11}{4}$

Percentages

- 17) Find 23% of £165
 £37.95
 18) Increase £34 by 12% £38.08
 19) Decrease 70kg by 8% 64.4
 20) What is 12 out of 40 as a percentage?
 30%.

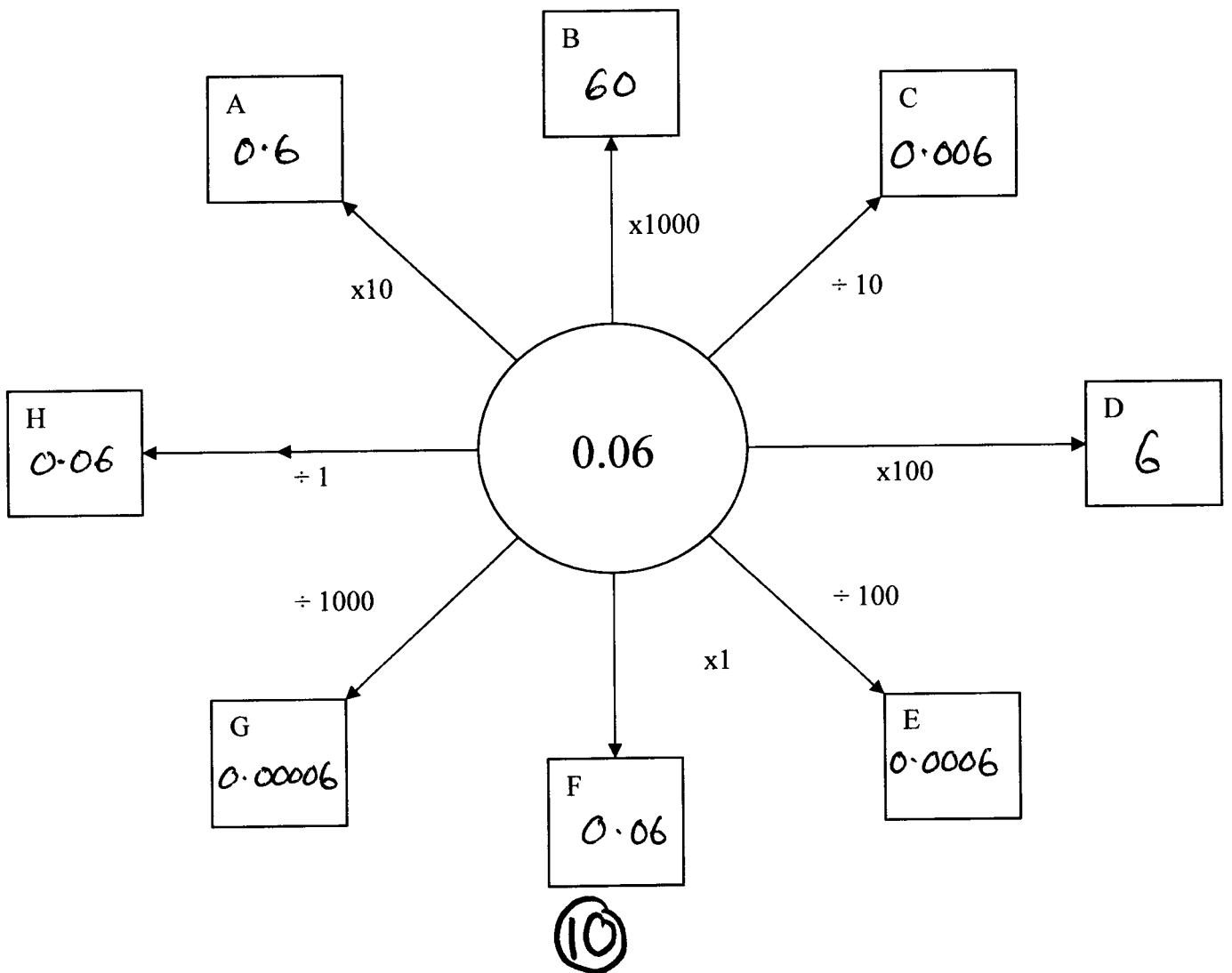
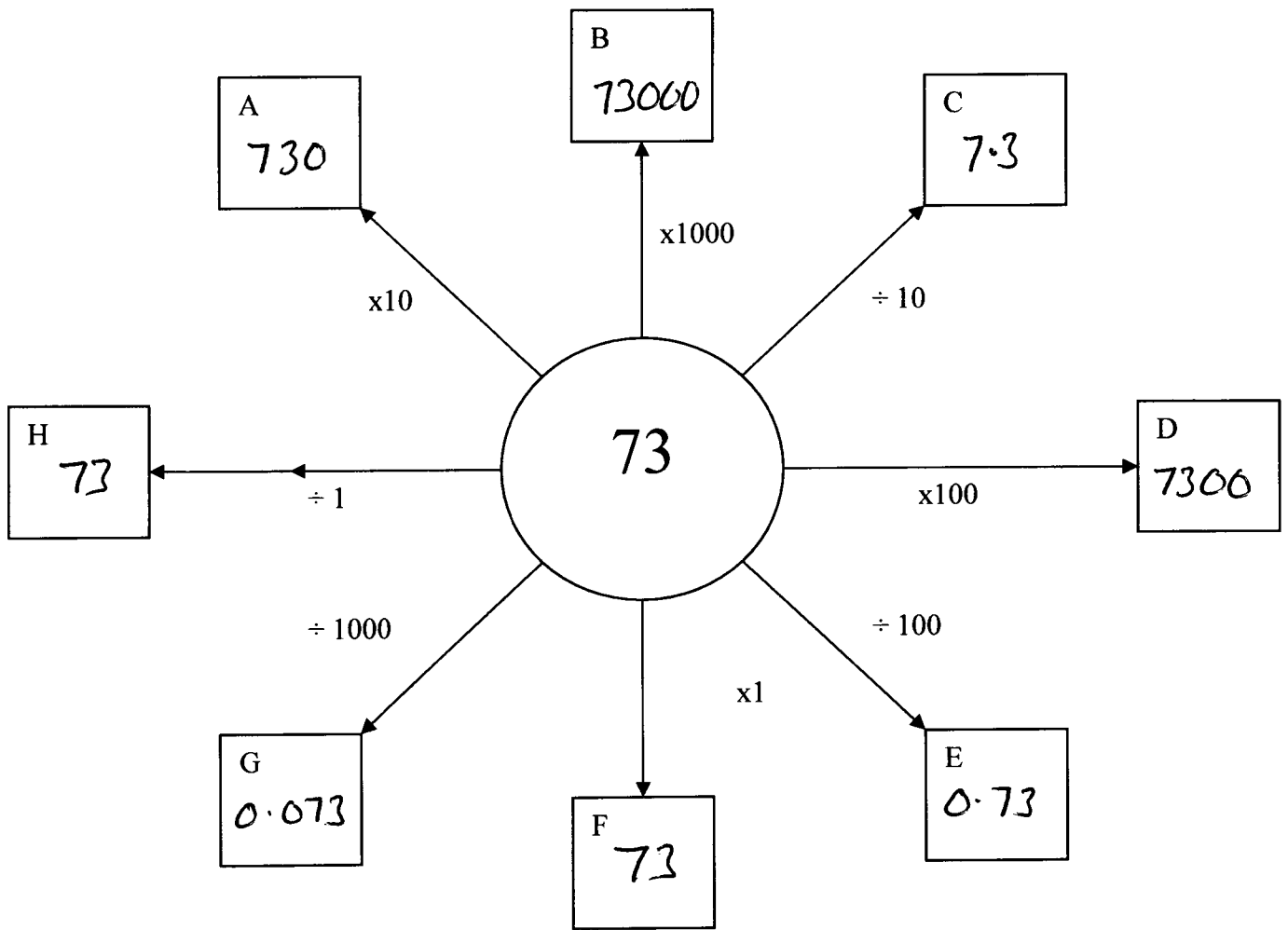
Powers and Roots

- 21) 5^2 25 22) 4^3 64
 23) 10^3 1000 24) 0.5^2 0.25
 25) $\sqrt{16}$ 4 26) $\sqrt{81}$ 9
 27) $\sqrt[3]{8}$ 2 28) $\sqrt[3]{27}$ 3

Estimating

- 29) Estimate an answer to $79 \times £5.98$. $80 \times 6 = £480$
 30) Estimate an answer to $4.9 + 5.1 \times 8.01$ $5 + 5 \times 8$
 5 + 40
 = 45

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Maths Number Activity Sheet

Complete the times tables questions

3 x 7	4 x 8	9 x 6	8 x 7	7 x 7	6 x 6	4 x 9	8 x 9	9 x 3	8 x 6
21	32	54	56	49	36	36	72	27	48

$49 \div 7 = 7$ $36 \div 9 = 4$ $28 \div 8 = 4 \text{ r } 4$ $63 \div 7 = 9$
4.5

Use the box method to find 7×38

x	30	8
7	210	56

$$\begin{array}{r}
 210 \\
 + 56 \\
 \hline
 266
 \end{array}$$

Complete these sequences

6, 13, 20, 27, 34, 41, 48

Rule is + 7

23, 16, 9, 2, -5, -12, -19

Rule is - 7

Write these numbers in order of size smallest to largest.

1.3, 0.8, 0.7, 0.12, 0.5

0.12, 0.5, 0.7, 0.8, 1.3

0.2, 0.35, 0.1, 0.235, 0.8

0.1, 0.2, 0.235, 0.35, 0.8

Circle the square numbers 2 (16) 38 (81) (100) 17 (1)

Circle the prime numbers (2) 6 9 (11) (13) 15 (19)

Complete these tables

100%	50%	25%	75%	10%
60	30	15	£45	6

whole	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$
36	18	£9	27

Find

$\frac{3}{5}$ of 20 12

$\frac{2}{3}$ of 21 14

(11)

$$\frac{1}{3} + \frac{3}{5} = \frac{5}{15} + \frac{9}{15} = \frac{14}{15}$$

$$\frac{5}{6} - \frac{1}{5} = \frac{25}{30} - \frac{6}{30} = \frac{19}{30}$$

$$\frac{1}{6} \times \frac{2}{5} = \frac{2}{30} = \frac{1}{15}$$

$$\frac{5}{6} \div \frac{1}{3} = \frac{5}{6} \times \frac{3}{1} = \frac{15}{6} = \frac{5}{2} = 2\frac{1}{2}$$

Fill in the missing times in this table

am/pm	7 am	9 am	2 pm	6:30pm	8 pm	9:15pm	11 pm
24 hour	07:00	09:00	14:00	18:30	20:00	21:15	23:00

What is the time?	In am/pm time	In 24 hour time
2 hours after 4.15 pm	6.15 pm	18:15
3 hours before 2.30 pm	11:30 am	11:30
1 hour 30 minutes after 4.45 pm	6.15 pm	18:15
45 minutes after 6.50 pm	7:35 pm	19:35
1 hour 35 minutes before 2.15 pm	12:40pm	12:40

How long is it between? 1.35 pm and 5.10 pm 3h 35 min

7.25 am and 2.15 pm 6h 50 min.

(0.2 x 60 = 12)

What is 1.2 hours in hours and minutes? 1 hour 12 min

What is 3 hours 27 minutes as a decimal of an hour? 3.45 hours

(12)

$$27 \text{ min} = \frac{27}{60} = 0.45 \text{ hours}$$