

Mental Objectives Year 4



FOCUS: NUMBERS TO 10,000

Year Four Recall

- Review addition and subtraction facts within 20, ensure application to 10, 100 and 1000 ($6 + 3$, $60 + 30$, $600 + 300$, $6000 + 3000$)
 - Doubles and halves of multiples of 10, 100 or 1000 ($6 + 6$, $60 + 60$, $600 + 600$, $6000 + 6000$)
 - All multiplication and division facts to 12×12
 - Multiplication and division by zero and one facts
 - Division and multiplication by 10 and 100
 - Conversion of kilometres to metres, hours to minutes, years to months, weeks to days
 - Complements of hundredths that make 1
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Autumn1

Read and write numbers to 10,000

Count on and back in 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures

Order a set of decimal numbers to one decimal place

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60 + 30$ $600 + 300$ $6000 + 3000$ etc

Recall addition and subtraction facts for each number up to 20

Recall addition and subtraction facts for 100

Multiply and divide by 0 and 1 facts

Recall multiplication and division facts for 2, 3, 4, 5, 6, 8, 10 and 9x tables

(Focus especially on multiplication ready for check)

Multiply whole numbers by 10 or 100 (whole number answers)

Divide whole numbers by 10 or 100 (whole number answers)

Start to convert kilometres to metres, hours to minutes, years to months, weeks to days

Autumn 2

Read and write numbers to 10,000

Count on and back in 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60 + 30$ $600 + 300$ $6000 + 3000$ etc

Recall addition and subtraction facts for 100

Multiply and divide by 0 and 1 facts

**Recall multiplication and division facts for 2, 3, 4, 5, 6, 8, 9, 10, 11 and 12x tables
(Focus especially on multiplication ready for check)**

Multiply whole numbers by 10 or 100 (whole number answers)

Divide whole numbers by 10 or 100 (whole number answers)

Double multiples of 10,100,1000 e.g. $6+6$ $60+60$ $600+600$ $6000+6000$

Halve multiples of 10,100,1000

Start to convert kilometres to metres, hours to minutes, years to months, weeks to days

Double any number up to 100

Halve any number up to 200

Count in fraction steps, e.g. $1/5$, $2/5$, $3/5$...

Spring 1

Read and write numbers with one decimal place

Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals.

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60+30$ $600+300$ $6000+3000$ etc

Recall addition and subtraction facts for 100

Multiply and divide by 0 and 1 facts

Recall multiplication facts for all tables and derive associated division facts

(Focus especially on multiplication ready for check)

Identify patterns of similar calculations, e.g. if I know 7×8 , I also know 0.7×0.8 , 70×8 , 70×80 etc.

Multiply whole numbers by 10 or 100 (whole number answers)

Divide whole numbers by 10 or 100 (whole number answers)

Multiply and divide numbers by 10, including those which have answers to one decimal place.

Double multiples of 10,100,1000 e.g. $6+6$ $60+60$ $600+600$ $6000+6000$

Halve multiples of 10,100,1000

Convert kilometres to metres, hours to minutes, years to months, weeks to days

Know complements of hundredths that make 1

Count in fraction steps, e.g. $1/5$, $2/5$, $3/5$...

Spring 2

Read and write numbers with one decimal place

Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals.

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60+30$ $600+300$ $6000+3000$ etc

Recall addition and subtraction facts for 100

Recall and use addition and subtraction facts for multiples of 100 totalling 1000

Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place)

Use partitioning to double or halve any number, including decimals to one decimal place

Multiply and divide by 0 and 1 facts

Recall multiplication facts for all times tables and derive associated division facts

Identify patterns of similar calculations, e.g. if I know 7×8 , I also know 0.7×0.8 , 70×8 , 70×80 etc.

Multiply whole numbers by 10 or 100 (whole number answers)

Divide whole numbers by 10 or 100 (whole number answers)

Multiply and divide numbers by 10, including those which have answers to one decimal place.

Double multiples of 10,100,1000 e.g. $6+6$ $60+60$ $600+600$ $6000+6000$

Halve multiples of 10,100,1000 eg half of 1,200

Convert kilometres to metres, hours to minutes, years to months, weeks to days

Know complements of hundredths that make 1

Count in fraction steps, e.g. $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$...

Summer 1

Read and write numbers with one decimal place

Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60+30$ $600+300$ $6000+3000$ etc

Recall addition and subtraction facts for 100

Recall and use addition and subtraction facts for multiples of 100 totalling 1000

Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).

Use partitioning to double or halve any number, including decimals to one decimal place

Recall multiplication facts for all times tables and derive associated division facts

Identify patterns of similar calculations, e.g. if I know 7×8 , I also know 0.7×0.8 , 70×8 , 70×80 etc

Multiply whole numbers by 10 or 100 (whole number answers)

Divide whole numbers by 10 or 100 (whole number answers)

Multiply and divide numbers by 10 and 100, including those which have answers to one decimal place

Double multiples of 10,100,1000 e.g. $6+6$ $60+60$ $600+600$ $6000+6000$

Halve multiples of 10,100,1000 eg half of 1,200

Convert kilometres to metres, hours to minutes, years to months, weeks to days

Know complements of hundredths that make 1

Count in fraction steps, e.g. $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$...

Summer 2

Read and write numbers with one decimal place

Count on and back in 0.1s, 1s, 10s or 100s from any number up to 10,000

Count forwards and backwards in equal steps and describe any patterns in the sequence

Order a set of random numbers to at least 10,000 including amounts of money and measures involving decimals.

Review recall of addition and subtraction facts within 20. Ensure application to within 10, 100 and 1000 e.g. $6+3$ $60+30$ $600+300$ $6000+3000$ etc

Recall addition and subtraction facts for 100

Recall and use addition and subtraction facts for multiples of 100 totalling 1000

Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).

Use partitioning to double or halve any number, including decimals to one decimal place

Recall multiplication facts for all times tables and derive associated division facts

Identify patterns of similar calculations, e.g. if I know 7×8 , I also know 0.7×0.8 , 70×8 , 70×80 etc.

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Divide whole numbers by 10 or 100 (whole number answers)

Multiply and divide numbers by 10 and 100, including those which have answers to one decimal place

Double multiples of 10,100,1000 e.g. $6+6$ $60+60$ $600+600$ $6000+6000$

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