

Level B: Personal checklist of mental skills

Set B1	
Strand:	pupils should be able to add and subtract : - mentally for numbers 0 to 20; in some cases beyond 20.

B1.1	Add mentally for numbers 0 to 20.
B1.2	Add mentally for numbers 0 to 20.
B1.3	Add mentally - in some cases beyond 20.
B1.4	Subtract mentally for numbers 0 to 20.
B1.5	Subtract mentally for numbers 0 to 20.
B1.6	Subtract mentally - in some cases beyond 20.
B1.7	Add/ Subtract mentally - Mixed questions.
B1.8	Add/ Subtract mentally - Mixed questions.

Set B2	
Strand:	pupils should be able to add and subtract : in applications in number, measurement and money, including payments and change up to £1.

B2.1	Applications involving addition & subtraction.
B2.2	Applications involving addition & subtraction.
B2.3	Applications involving addition & subtraction.

Set B3	
Strand:	pupils should be able to multiply and divide : - mentally by 2, 3, 4, 5, 10 within the confines of these tables.

B3.1	Multiplication Tables (Mixed exercise involving 2 & 4)
B3.2	Multiplication Tables (Mixed exercise involving 5 & 10)
B3.3	Multiplication Tables (Mixed exercise involving 2 & 10)
B3.4	Multiplication Tables (Mixed exercise involving 3 & 4)
B3.5	Multiplication Tables (Mixed exercise involving 3 & 5)
B3.6	Multiplication Tables (Mixed exercise involving 4 & 10)
B3.7	Multiplication Tables (Mixed exercise involving 2, 3 & 4)
B3.8	Multiplication Tables (Mixed exercise involving 4, 5 & 10)
B3.9	Multiplication Tables (Mixed exercise involving 2, 3, 4, 5,10)
B3.ten	Multiplication Tables (Mixed exercise involving 2, 3, 4, 5,10)

Set B4	
Strand:	pupils should be able to multiply and divide : in applications in number, measurement and money.

B4.1	Applications involving multiplication & division.
B4.2	Applications involving multiplication & division.
B4.3	Applications involving multiplication & division.

Set B5	
Strand:	pupils should be able to round 2-digit whole numbers to the nearest ten.

B5.1	Round 2-digit numbers to the nearest ten.
B5.2	Round 2-digit numbers to the nearest ten.

Set B6	
Strand:	pupils should be able find halves and quarters of quantities involving 1 or 2 digit numbers.

B6.1	Find halves and quarters of 1 or 2 digit numbers.
B6.2	Find halves and quarters of 1 or 2 digit numbers.

Set B7	
Strand:	Covers all mental methods described in B1 - B6 above.

B7.1	10 mixed questions.
B7.2	10 mixed questions.
B7.3	10 mixed questions.

Level C: Personal checklist of mental skills

Set C1	
Strand:	pupils should be able to add and subtract : - mentally for one digit to or from whole numbers up to 3 digits; beyond in some cases involving multiples of 10. - mentally for subtraction by " adding on "

C1.1	Add 1 digit whole number to a 2/3 digit whole number.
C1.2	Add whole number multiples of 10.
C1.3	Subtract mentally by "adding on"
C1.4	Subtract 1 digit whole number from a 2/3 digit whole number.
C1.5	Subtract whole number multiples of 10.
C1.6	Add and subtract. Mixed Exercise.

Set C2	
Strand:	pupils should be able to add and subtract : in applications in number, measurement and money to £20.

C2.1	Add and subtract. Applications involving number/ money.
C2.2	Add and subtract. Applications involving number/ measure.

Set C3	
Strand:	Pupils should be able to multiply and divide : - mentally within the confines of all tables to 10.

C3.1	Multiplication Tables (3 & 4) multiplying {6,7,8,9,10}
C3.2	Multiplication Tables (6 & 7) multiplying {6,7,8,9,10}
C3.3	Multiplication Tables (8 & 9) multiplying {6,7,8,9,10}
C3.4	Multiplication Tables (mixed exercise 1)
C3.5	Multiplication Tables (mixed exercise 2)

Set C4	
Strand:	Pupils should be able to multiply and divide : - mentally for any 2 or 3 digit whole number by 10.

C4.1	2 or 3 digit whole number $\times 10$.
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C4.2	Applications involving 2 or 3 digit whole number $\times 10$.
C4.3	2 or 3 digit whole number $\div 10$.
C4.4	Applications involving 2 or 3 digit whole number $\div 10$.
C4.5	Mixed exercise involving \times/\div of 2/3 D whole number by 10.

Set C5	
Strand:	Pupils should be able to multiply and divide : - in applications involving money to £20. - round 3 digit whole numbers to the nearest 10.

C5.1	Applications involving money.
C5.2	Round a 3-digit whole number to the nearest 10.
C5.3	Round a 3-digit whole number to the nearest 10.

Set C6	
Strand:	Pupils should be able to - find simple fractions $\frac{1}{3}, \frac{1}{5}, \frac{1}{10}$, of quantities involving 1 or 2 digit numbers

C6.1	Find simple fractions of 1/2 digit numbers.
C6.2	Find simple fractions of 1/2 digit numbers.

Set C7	
Strand:	Pupils should be able to work with time .

C7.1	Work with time
C7.2	Work with time

Set C8	
Strand:	Covers all mental methods described in C1 - C8 above.

C8.1	10 mixed questions.
C8.2	10 mixed questions.
C8.3	10 mixed questions.

Level D: Personal checklist of mental skills

Set D1	
Strand:	pupils should be able to add and subtract: - mentally for 2 digit whole numbers.

D1.1	Addition of 2 digit whole numbers.
D1.2	Addition of 2 digit whole numbers, further practice.
D1.3	Subtraction of 2 digit whole numbers.
D1.4	Subtraction of 2 digit whole numbers, further practice.
D1.5	Addition & subtraction of 2 digit whole numbers.

Set D2	
Strand:	pupils should be able to add and subtract: - mentally for 2 digit whole numbers , beyond in some cases, involving multiples of 10 or 100.

D2.1	Addition/subtraction of 2/3 digit whole numbers involving multiples of 10.
D2.2	Addition/subtraction of 2/3 digit whole numbers involving multiples of 10.
D2.3	Addition/subtraction of 3/4 digit whole numbers involving multiples of 100.

Set D3	
Strand:	Pupils should be able to multiply and divide: - mentally for whole numbers by single digits: easy examples only;

D3.1	Multiplication of 2 digit whole number by single digit whole number.
D3.2	Multiplication of 2 digit whole number by single digit whole number.
D3.3	Division of 2/3 digit whole number by single digit whole number (no remainders).
D3.4	Division of 2/3 digit whole number by single digit whole number (with remainders).
D3.5	Multiplication & division of 2/3 digit whole number by single digit whole number. (Mixed exercise)

Set D4	
Strand:	Pupils should be able to multiply and divide : mentally for 4 digit numbers including decimals by 10 or 100 ;

D4.1	Multiplication by 10. Up to 4 digits (decimals included).
D4.2	Multiplication by 100. Up to 4 digits (decimals included).
D4.3	Division by 10. Up to 4 digits (decimals included).
D4.4	Division by 100. Up to 4 digits (decimals included).
D4.5	Multiplication & division by 10 & 100. Mixed exercise.

Set D5	
Strand:	Covers all mental methods described in D1 - D4 above.

D5.1	10 mixed questions.
D5.2	10 mixed questions.
D5.3	10 mixed questions.
D5.4	10 mixed questions.

Level E: Personal checklist of mental skills

Set E1	
Strand:	pupils should be able to add and subtract : - mentally for 2 digit numbers including decimals .

E1.1	Addition of 2 digit numbers including decimals.
E1.2	Addition of 2 digit numbers including decimals, further practice.
E1.3	Subtraction of 2 digit numbers including decimals.
E1.4	Subtraction of 2 digit numbers including decimals, further practice.
E1.5	Addition & subtraction of 2 digit numbers including decimals.

Set E2	
Strand:	pupils should be able to add and subtract : - positive and negative numbers in applications such as a rise in temperature.

E2.1	Addition /subtraction of positive and negative numbers in applications.
E2.2	Addition /subtraction of positive and negative numbers in applications.

Set E3	
Strand:	Pupils should be able to multiply and divide : mentally for any whole numbers by a multiple of 10 or 100 (such as 20 or 200)

E3.1	Multiplication of any whole number by a multiple of 10 or 100.
E3.2	Division of any whole number by a multiple of 10 or 100.
E3.3	Multiplication or division of any whole number by a multiple of 10 or 100.

Set E4	
Strand:	Pupils should be able to multiply and divide : mentally for any numbers including decimals by 10, 100, 1000 .

E4.1	Multiplication of any number (plus decimals) by 10, 100, 1000 .
E4.2	Multiplication of any number (plus decimals) by 10, 100, 1000 .
E4.3	Division by 10, 100, 1000 .
E4.4	Division by 10, 100, 1000 .
E4.5	Multiplication & division by 10, 100, 1000 . Mixed exercise.

Set E5	
Strand:	Work with Fractions and Percentages: - mentally find widely-used fractions and percentages of whole number quantities.

E5.1	Find widely used fractions of whole number quantities.
E5.2	Find widely used percentages of whole number quantities.
E5.3	Find widely used fractions/ percentages of whole number quantities.
E5.4	Find widely used fractions/ percentages of whole number quantities.

Set E6	
Strand:	Work with Ratio

E6.1	Ratio
E6.2	Ratio

Set E7	
Strand:	Covers all mental methods described in E1 - E6 above.

E7.1	10 mixed questions.
E7.2	10 mixed questions.
E7.3	10 mixed questions.

Level F: Personal checklist of mental skills

Set F1	
Strand:	pupils should be able to add and subtract : - mentally for 2 digit numbers including integers .

F1.1	Addition/Subtraction of 2 digit numbers including integers.
F1.2	Addition/Subtraction of algebraic expressions.
F1.3	Addition/Subtraction of algebraic expressions and integers - mixture.

Set F2	
Strand:	pupils should be able to multiply and divide : - mentally for decimals and integers by a single digit (easy examples only)

F2.1	Multiply/Divide integers.
F2.2	Multiply/Divide decimals by a single digit.
F2.3	Multiply/Divide integers & decimals - mixture.
F2.4	Work with scientific notation .
F2.5	Work with powers/indices .

Set F3	
Strand:	Pupils should be able to round any number : - to a required number of decimal places - to a required number of significant figures .

F3.1	Rounding to a number of decimal places or significant figures .
F3.2	Rounding to a number of decimal places or significant figures . (More Practice)

Set F4	
Strand:	Pupils should be able to work with fractions - use mental methods to add, subtract, multiply and divide fractions , including mixed numbers in everyday contexts.

F4.1	Work with improper fractions and mixed numbers .
F4.2	Add and subtract fractions , including mixed numbers.
F4.3	Multiply and divide fractions .

Set F5	
Strand:	Work with Fractions and Percentages: - Understand and use equivalences of fractions, decimals and percentages. - Apply percentage increase/ decrease in context.

F5.1	Equivalence between Fractions, decimals and percentages.
F5.2	Equivalence between Fractions, decimals and percentages.
F5.3	Calculate percentages mentally.
F5.4	Apply percentage increase/ decrease in context.

Set F6	
Strand:	Work with Ratio Algebraic simplification factorising

F6.1	Ratio
F6.2	Factorising / Algebraic simplification
F6.3	Factorising / Algebraic simplification

Set F7	
Strand:	Covers all mental methods described in F1 - F6 above.

F7.1	10 mixed questions.
F7.2	10 mixed questions.
F7.3	10 mixed questions.