

# A QUICK GUIDE TO MATHSBOX

## RETRIEVAL – FLUENCY AND NUMERACY – KEY STAGE 2 to KEY STAGE 4

RETRIEVAL

### SKILLS CHECKS

Weekly skills checks for Year 3 to A LEVEL.

(6 different sets for GCSE)

10 or 5 questions to project or 20 question worksheets to print.

Student record sheets and answers included.

**New versions just added to match the WHITE ROSE MATHS Scheme of Learning**

Week 6

- 1 Work out  $\frac{1}{10} \times 2\frac{1}{5}$
- 2 Express 13 out of 40 as a percentage
- 3 Expand and simplify  $(x-1)(x+2)(x-1)$
- 4 The answer is 0.6 when a number  $n$ , has been rounded to 1 significant figure. Complete the inequality  $? \leq n < ?$
- 5 Find the 7th term 1200, 800, 400, 0
- 6 Factorise  $x^2 - 11x - 12$
- 7 Work out  $4 \times 10^3 \times 5.5 \times 10^4$  (in standard form)
- 8 Where is the **y** intercept of the line  $y - 6 = 2x$ ?
- 9 Simplify  $2x^3y^2z \times 2y^2z^2$
- 10 Solve  $\frac{4x}{3} - 2 = 2x - 10$

NEW VERSIONS ON THE WAY with an endless supply of questions to print or project.

NUMERACY

### NUMBER UP

300 differentiated numeracy worksheets starting with number bond to 10, up to complex calculations (270 similar versions to project)

### TIMES TABLES

Timed (or manual advance) tests to project for single or mixed tables.

- Tables squares
- Bingo Game
- Treasure Hunts
- Settlers
- Worksheets

8 SET 9 TABLES CHALLENGE

- 10 seconds per question
- 5 seconds per question
- 3 seconds per question

### MULTIPLYING DECIMALS

More than 240 quick question worksheets

DECIMALS MATCH

1) $0.2 \times 0.5 =$	2) $0.4 \times 5 =$
3) $8 \times 0.5 =$	4) $2.5 \div 0.5 =$
5) $0.2 \times 5 =$	6) $0.8 \times 0.5 =$
7) $0.7 \times 5 =$	8) $4 \times 0.5 =$
9) $11 \times 0.5 =$	10) $35 \div 5 =$
11) $5 \times 0.5 =$	12) $6 \div 5 =$
13) $0.6 \times 0.5 =$	14) $1.5 \div 0.5 =$
15) $12 \times 0.5 =$	16) $10 \times 5 =$

## TEACHING – QUESTIONS – ACTIVITIES – KEY STAGE 2 to KEY STAGE 4

QUESTIONS

### NEW iQUESTIONS

New topic specific questions to print or project at the click of a button - space to model solutions.

- up to 8 new questions on each click

- answers included

200+ sets available so far with more on the way

QUESTIONS

### DIFFERENTIATED QUESTIONS

Topic specific questions to print or project (with answers) 3 different 'levels' on each set

Adding Fractions

1) $\frac{1}{2} + \frac{1}{3} =$	2) $\frac{1}{4} + \frac{1}{6} =$	3) $\frac{1}{5} + \frac{1}{10} =$
4) $\frac{1}{3} + \frac{1}{6} =$	5) $\frac{1}{8} + \frac{1}{4} =$	6) $\frac{1}{10} + \frac{1}{5} =$
7) $\frac{1}{6} + \frac{1}{3} =$	8) $\frac{1}{12} + \frac{1}{6} =$	9) $\frac{1}{15} + \frac{1}{10} =$
10) $\frac{1}{4} + \frac{1}{8} =$	11) $\frac{1}{7} + \frac{1}{14} =$	12) $\frac{1}{9} + \frac{1}{18} =$
13) $\frac{1}{5} + \frac{1}{10} =$	14) $\frac{1}{12} + \frac{1}{6} =$	15) $\frac{1}{16} + \frac{1}{8} =$
16) $\frac{1}{8} + \frac{1}{4} =$	17) $\frac{1}{10} + \frac{1}{5} =$	18) $\frac{1}{12} + \frac{1}{6} =$
19) $\frac{1}{6} + \frac{1}{3} =$	20) $\frac{1}{10} + \frac{1}{20} =$	21) $\frac{1}{15} + \frac{1}{10} =$

Area (3)

QUESTIONS

### TREASURE HUNTS LOOP CARDS

20 question alternatives to textbook/worksheet exercises

306.9 cm<sup>2</sup>

Calculate the surface area (correct to 1 decimal place)

Volume and surface area of a frustum

QUESTIONS

### BINGO GAMES

30 question bingo games  
40 different cards to print (or DIY) questions to project + checklist

BINGO

Work out

$30 - 5 \times 5$

QUESTIONS

### EXIT TICKETS

Ready to use print sheets of questions with answers (3-6 sheets per A4 Page)

TRANSFORMING GRAPHS

The graph of  $y = f(x)$  is shown. Sketch the graph  $y = f(x - 3)$

EXIT TICKET

1	$365 - 123 =$
2	$453 - 247 =$
3	$618 - 459 =$

EXIT TICKET

QUESTIONS

### MULTIPLE CHOICE QUIZZES

5 Question multiple choice quizzes to project with 'common mistake' answers in the options

Express 0.7 as a percentage

A 0.70% B 0.7% C 7% D 70%

QUESTION 4

Calculate  $x$

A 36° B 144° C 72° D 108°

QUESTIONS

### SETTLERS

20 question activities - cross off the answers to find the target

Name \_\_\_\_\_

100	26	9	16	11	15, 17, 15, 13,	50, 49, 48, 47,	4, 9, 14, 19,	300, 250, 200, 150,
130	14	18	60	54	105, 85, 65, 45,	30, 26, 22, 18,	1000, 900, 800, 700,	10, 40, 70, 100,
500	39	22	32	48	6, 11, 20, 27,	100, 90, 80, 70,	7, 15, 23, 31,	150, 120, 90, 60,
250	30	51	25	600	1, 3, 5, 7,	10, 40, 110, 160,	11, 21, 31, 41,	1, 2, 4, 8,
200	24	19	210	34	3, 7, 11, 15,	1, 4, 16, 64,	50, 43, 36, 29,	100, 200, 300, 400,

Find the next term of a sequence

□ □ □ □ □ TOTAL □

# PROBLEM SOLVING

PROBLEM SOLVING

## STRUCTURED PROBLEMS

Each problem has 3 starter problems checking the 'skills' needed to solve the main problem

PROBLEM SOLVING

## UNSTRUCTURED PROBLEMS

More than 70 problems with worked solutions to print or project

# CHALLENGES AND GAMES

CHALLENGES

## NUMBER DETECTIVES

Challenges to project based on recall of number types (prime, factors, multiple, squares.....)

CHALLENGES

## SKI RUNS

Differentiated 10 question mixed arithmetic challenges to project. 3 different levels on each page

CHALLENGES

## WARMUPS

Arithmetic, single operations or mixed challenges to project.

# GCSE SPECIFIC RESOURCES

# AS/A LEVEL RESOURCES

REVISION

## FOCUS TASKS (Grades 1 to 9)

185 worksheets and presentations, with solutions and 'similar questions', targeting specific grades

RETRIEVAL

## SKILLS CHECKS

5 Question skills check to print or project. Sets for AS and A Level, core maths, statistics and mechanics. Full worked solutions included.

ASSESSMENT

## I CAN...TOPIC WORKSHEETS

Topic specific worksheets with questions increasing in difficulty (answer sheet included)

QUESTIONS

## 3 TOPIC QUESTIONS TO PROJECT

A collection of topic specific resources each with 3 questions to project or print (and solutions). There are 2 versions for each topic which could be used as a before/after check

Includes  
Further Maths  
Pure Topics

iQUESTIONS - Formulae to learn  
TREASURE HUNTS / BINGO GAMES  
4 MIXED QUESTIONS

REVISION NOTES  
TREASURE HUNTS / BINGO GAMES  
SETTLERS / RELAYS

## QUICK COVER

A collection more than 100 ready use lessons for 'last minute' cover resources. Each lesson includes printable

- notes and methods
- questions
- answers

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