## Autumn Test 1

Teacher guidance
Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator, within 1
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Missing number statements with all four operations


## Review: Division of two-digit numbers by 10 or 100

## A teaching suggestion

Step 1 Display $84 \div 10=$
Step2 Explain that another way to write $84 \div 10$ is $\frac{84}{10}$, where the line represents the division sign and the number says'eighty-four tenths'.
step 3 Explain that another way to write eightyfour tenths is to use a decimal point. Display HTO.t and explain that t stands for tenths, and that everything after the decimal point is part of a whole number. $\frac{84}{10}=8.4$

Step 4 Repeat with similar calculations
(e.g. $93 \div 10=\frac{93}{10}=9.3$ ).

## An alternative suggestion

Step 1 Display $71 \div 100=$
step2 Explain that another way to write $71 \div 100=$ is $\frac{71}{100}$, where the line represents the division sign and the number says 'seventy-one hundredths'.
tep 3 Explain that another way to write seventyone hundredths is to use a decimal point. Display HTO.th and explain that t stands for tenths and h for hundredths, and that everything after the decimal point is part of a whole number. $\frac{71}{100}=0.71$

Repeat with similar calculations (e.g. $3 \div 100=\frac{3}{100}=0.03$ ).

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $4 \times 11=\square$ | 44 | 1 | Y4 Autumn Test 5 |
| 2 | $\square=7 \times 1$ | 7 | 1 | Y4 Autumn Test 6 |
| 3 | $36 \div 12=\square$ | 3 | 1 | Y4 Summer Test 2 |
| 4 | $0 \times 20=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 5 | $\frac{1}{3}$ of $33=\square$ | 11 | 1 | Y2 Summer Test 5 |
| 6 | $84=\square \times 7$ | 12 | 1 | Y4 Autumn Test 3, Y4 Summer Test 2 |
| 7 | $47 \div 1=\square$ | 47 | 1 | Y4 Autumn Test 6 |
| 8 | $493+382=\square$ | 875 | 1 | Y4 Spring Test 1 |
| 9 | $60 \times 9=\square$ | 540 | 1 | Y4 Spring Tests 2 and 4, Y3 Spring Test 2 |
| 10 | $\square=327-261$ | 66 | 1 | Y4 Spring Test 3 |
| 11 | $21+\square=90$ | 69 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 12 | $300 \times 8=\square$ | 2400 | 1 | Y4 Summer Test 5, Y3 Summer Test 3 |
| 13 | $86-\square=38$ | 48 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 14 | $56 \div 4=\square$ | 14 | 1 | Y4 Autumn Test 2 |
| 15 | $6384+2576=\square$ | 8960 | 1 | Y4 Spring Test 1 |
| 16 | $2 \div 10=\square$ | 0.2 | 1 | Y5 Autumn Test 1 |
| 17 | $35 \times 7=\square$ | 245 | 1 | Y4 Autumn Test 1 |
| 18 | $7120-4332=\square$ | 2788 | 1 | Y4 Spring Test 3 |
| 19 | $524 \times 3=\square$ | 1572 | 1 | Y4 Summer Test 1 |
| 20 | $37 \div 100=\square$ | 0.37 | 1 | Y5 Autumn Test 1 |
| 21 | $\frac{3}{4}$ of $28=\square$ | 21 | 1 | Y3 Autumn Test 4 |
| 22 | $\square=4 \times 27 \times 5$ | 540 | 1 | Y4 Summer Test 3 |
| 23 | $\square \div 3=28$ | 84 | 1 | Y4 Autumn Test 1, Y4 Autumn Test 3 |
| 24 | $32 \div 10=\square$ | 3.2 | 1 | Y5 Autumn Test 1 |
| 25 | $\square \times 6=96$ | 16 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| Total marks |  |  | 25 |  |

## Autumn Test 1

Name:

Class:
Date:


## Autumn Test 1 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| Multiples of tables | 9 | 12 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\div$ by 10 or 100 | 16 | 20 | 24 |  |  |  |  |  |  |  |
| Short $x$ | 17 | 19 | 23 |  |  |  |  |  |  |  |
| Short $\div$ | 14 | 25 |  |  |  |  |  |  |  |  |
| Fractions | 5 | 21 |  |  |  |  |  |  |  |  |
| Missing numbers | 6 | 11 | 13 | 23 | 25 |  |  |  |  |  |
| + | 8 | 15 |  |  |  |  |  |  |  |  |
| - | 10 | 11 | 13 | 18 |  |  |  |  |  |  |
| $\times$ | 1 | 2 | 4 | 9 | 12 | 17 | 19 | 21 | 22 | 23 |
| $\div$ | 3 | 5 | 6 | 7 | 14 | 16 | 20 | 21 | 24 | 25 |
| $\div$ |  |  |  |  |  |  |  |  |  |  |

# Autumn Test 2 

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Division of two-digit numbers by 10 or 100
- Missing number statements with all four operations


## Review: Addition and subtraction of fractions with the same denominator

## A teaching suggestion

tep 1 Cut a circle into sixths and count the sixths. Hold up different amounts and ask the children to call out what you are holding (e.g. four sixths).
tep 2 Hold one sixth in one hand and four sixths in the other hand. Ask the children what you are holding in each hand and then what you are holding altogether. Agree that you are always holding sixths, so:
$\frac{1}{6}+\frac{4}{6}=\frac{5}{6}$
tep 3 Next, hold two sixths in one hand and five sixths in the other hand. Ask the children what you are holding in each hand and then what you are holding altogether. Agree that you are always holding sixths, so:
$\frac{2}{6}+\frac{5}{6}=\frac{7}{6}$
Show how the seven sixths can be used to make one circle with one sixth left, and show the children how to write this as a mixed number: $1 \frac{1}{6}$

5 Repeat lots of examples together, then with a partner, and then working independently.

| $\begin{aligned} & \text { Question } \\ & \text { number } \end{aligned}$ | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $1 \times 15=\square$ | 15 | 1 | Y4 Autumn Test 6 |
| 2 | $\square=800 \times 2$ | 1600 | 1 | Y4 Summer Test 5 |
| 3 | $\square=120 \div 10$ | 12 | 1 | Y4 Summer Test 2 |
| 4 | $29 \div 1=\square$ | 29 | 1 | Y4 Autumn Test 6 |
| 5 | $54=\square+49$ | 5 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 6 | $1 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 7 | $\square-26=53$ | 79 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 2 |
| 8 | $4=\square \div 9$ | 36 | 1 | Y4 Autumn Test 3, Y4 Spring Test 2 |
| 9 | $\frac{2}{6}+\frac{4}{6}=\square$ | 1 (or equiv) $\frac{6}{6}$ | 1 | Y5 Autumn Test 2 |
| 10 | $37 \times 7=\square$ | 259 | 1 | Y4 Autumn Test 1 |
| 11 | $731-418=\square$ | 313 | 1 | Y4 Spring Test 3 |
| 12 | $\frac{16}{6}-\frac{11}{6}=\square$ | $\frac{5}{6}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 13 | $87 \div 3=\square$ | 29 | 1 | Y4 Autumn Test 2 |
| 14 | $85=\square \times 5$ | 17 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| 15 | $1799+2831=\square$ | 4630 | 1 | Y4 Spring Test 1 |
| 16 | $8 \div 10=\square$ | 0.8 | 1 | Y5 Autumn Test 1 |
| 17 | $\square=\frac{2}{4}$ of 12 | 6 | 1 | Y3 Autumn Test 4 |
| 18 | $426 \times 6=\square$ | 2556 | 1 | Y4 Summer Test 1 |
| 19 | $6425-1537=\square$ | 4888 | 1 | Y4 Spring Test 3 |
| 20 | $63 \div 100=\square$ | 0.63 | 1 | Y5 Autumn Test 1 |
| 21 | $\square=2 \times 63 \times 5$ | 630 | 1 | Y4 Summer Test 3 |
| 22 | $614-\square=293$ | 321 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 23 | $\frac{4}{7}+\frac{9}{7}=\square$ | 1 $\frac{6}{7}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 24 | $\square+423=802$ | 379 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 25 | $61 \div 10=\square$ | 6.1 | 1 | Y5 Autumn Test 1 |
| Total marks |  |  | 25 |  |

## Autumn Test 2

Name:
Class: $\qquad$ Date:

$9 \quad \frac{2}{6}+\frac{4}{6}=$

$11731-418=$

$\square$
$1 3 \longdiv { 8 7 }$


| 15 | 1799 <br> 2831 |  |
| :--- | :--- | :--- |
|  |  | $\square$ |

## Autumn Test 2 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| Multiples of tables | 2 | 3 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\div$ by 10 or 100 | 3 | 16 | 20 | 25 |  |  |  |  |
| Short $x$ | 10 | 18 |  |  |  |  |  |  |
| Short $\div$ | 13 | 14 |  |  |  |  |  |  |
| Fractions | 9 | 12 | 17 | 23 |  |  |  |  |
| Missing numbers | 5 | 7 | 8 | 14 | 22 | 24 |  |  |
| + | 7 | 9 | 15 | 23 |  |  |  |  |
| - | 5 | 11 | 12 | 19 | 22 | 24 |  |  |
| $\times$ | 1 | 2 | 6 | 8 | 10 | 17 | 18 | 21 |
| $\div$ | 3 | 4 | 13 | 14 | 16 | 17 | 20 | 25 |

## Autumn Test 3

Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Division of two-digit numbers by 10 or 100
- Missing number statements with all four operations

New: Understanding a formal written method for subtraction with zeros

## A teaching suggestion

$\mathrm{S}^{\text {tep }} 1$
This is an extension of the 'Pirate Game' (see Year 4 Spring Test 3). It helps to develop conceptual understanding of a formal written method for subtraction. Display the number 500 and explain that this is the treasure the children have. Select three children and give one five cards with ' 100 ' written on each.

Select a child to be the pirate and underneath the 500 write' -265 '. Explain that this is what the pirate demands in payment.
tep 3 The pirate asks the'ones' child for 5. They cannot pay so whisper to the 'tens child': 'Lend me some treasure'. The 'tens' child responds:'I haven't got any!' and whispers to the 'hundreds' child: 'Lend me some treasure'. The 'hundreds' child responds: 'Alright, but l'm only giving you one!' and gives a hundred to the 'tens' child, who immediately swaps it for 10 tens. The 'tens' child then gives the 'ones' child a ten who swaps it for 10 ones.

Alter the displayed sum to show that the 'hundreds' child is now holding 4 hundreds, the 'tens' child is holding 9 tens and the 'ones' child is

| $45^{9 x} 0^{10}$ |
| ---: |
| $-2 \quad 65$ | holding 10 ones.

The pirate now demands payment from each child in turn and is paid. The amount remaining is written on the answer line (235).

Play the game with different subtractions. Allow the children to be dramatic!

| Question | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $6 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 2 | $8 \div 1=\square$ | 8 | 1 | Y4 Autumn Test 6 |
| 3 | $70=\square+20$ | 50 | 1 | Y3 Autumn Test 1, Y2 Autumn Test 4 |
| 4 | $52 \times 1=\square$ | 52 | 1 | Y4 Autumn Test 6 |
| 5 | $\square \div 10=4$ | 40 | 1 | Y4 Autumn Test 3 , Y2 Autumn Test 2 |
| 6 | $39 \times 2=\square$ | 78 | 1 | Y4 Autumn Test 1 |
| 7 | $72 \div 9=\square$ | 8 | 1 | Y4 Spring Test 2 |
| 8 | $\square=\frac{11}{9}-\frac{2}{9}$ | 1 (or equiv) | 1 | Y4 Autumn Test 5, Y4 Summer Test 2 |
| 9 | $11 \times 12=\square$ | 132 | 1 | Y4 Autumn Test 5, Y4 Summer Test 2 |
| 10 | $90 \div 5=\square$ | 18 | 1 | Y4 Autumn Test 2 |
| 11 | $\square+37=62$ | 25 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 2 |
| 12 | $327 \times 4=\square$ | 1308 | 1 | Y4 Summer Test 1 |
| 13 | $5 \div 10=\square$ | 0.5 | 1 | Y5 Autumn Test 1 |
| 14 | $7349+1775=\square$ | 9124 | 1 | Y4 Spring Test 1 |
| 15 | $\square=3500 \div 7$ | 500 | 1 | Y4 Summer Test 5 |
| 16 | $9425-2616=\square$ | 6809 | 1 | Y4 Spring Test 3 |
| 17 | $28 \div 100=\square$ | 0.28 | 1 | Y5 Autumn Test 1 |
| 18 | $7 \times 2 \times 6=\square$ | 84 | 1 | Y4 Summer Test 3 |
| 19 | $604-279=\square$ | 325 | 1 | Y5 Autumn Test 3 |
| 20 | $5 \times 23 \times 8=\square$ | 920 | 1 | Y4 Summer Test 3 |
| 21 | $\frac{3}{8}+\frac{6}{8}=\square$ | $1 \frac{1}{8}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 22 | $96=\square \times 4$ | 24 | 1 | Y4 Autumn Test 2 Y4 Autumn Test 3 |
| 23 | $64 \div 10=\square$ | 6.4 | 1 | Y5 Autumn Test 1 |
| 24 | $\square \div 6=25$ | 150 | 1 | Y4 Autumn Test 1, Y4 Autumn Test 3 |
| 25 | $5006-3247=\square$ | 1759 | 1 | Y5 Autumn Test 3 |
| Total marks |  |  | 25 |  |

## Autumn Test 3

Name:

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Date:


| 14 | 7349 |  |
| ---: | ---: | :--- |
| +1775 |  |  |
|  |  |  |


| 15 | $\square=3500 \div 7$ |  |
| :--- | :--- | :--- |
|  |  | $\square$ |

## Autumn Test 3 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 19 | 25 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiples of tables | 15 |  |  |  |  |  |  |  |  |
| $\div$ by 10 or 100 | 13 | 17 | 23 |  |  |  |  |  |  |
| Short $x$ | 6 | 12 | 20 | 24 |  |  |  |  |  |
| Short $\div$ | 10 | 22 |  |  |  |  |  |  |  |
| Fractions | 8 | 21 |  |  |  |  |  |  |  |
| Missing numbers | 3 | 5 | 11 | 22 | 24 |  |  |  |  |
| + | 14 | 21 |  |  |  |  |  |  |  |
| - | 3 | 8 | 11 | 16 | 19 | 25 |  |  |  |
| $\times$ | 1 | 4 | 5 | 6 | 9 | 12 | 18 | 20 | 24 |
| $\div$ | 2 | 7 | 10 | 13 | 15 | 17 | 22 | 23 |  |

## Autumn Test 4

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100


## New: Square numbers

## A teaching suggestion

Give the children some squared paper.
Use the squares to draw a $2 \times 2$ square and count the number of squares inside. Show that it has two rows and two columns and that $2 \times 2=4$.
eep3 Ask the children to investigate other squares that they can draw and to make a table of their results.

| Rows | Columns | Number of <br> squares |
| :---: | :---: | :---: |
| 2 | 2 | 4 |
|  |  |  |

${ }^{\text {eep }} 4$ Collect and display the results and explain that these numbers are called 'square numbers' because they make squares!

Chant the square times table ( $1 \times 1=1$, $2 \times 2=4,3 \times 3=9$ and so on).

Introduce the notation where $3^{2}=3$ multiplied by itself twice $\left(\right.$ hence the $\left.{ }^{2}\right)=$ 3 squared $=3 \times 3=9$.

- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Division of two-digit numbers by 10 or 100
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\square=5 \times 9$ | 45 | 1 | Y4 Spring Test 2 |
| 2 | $\frac{1}{3}$ of $60=\square$ | 20 | 1 | Y2 Summer Test 5 |
| 3 | $1 \times 1=\square$ | 1 | 1 | Y4 Autumn Test 6 |
| 4 | $48=\square \times 6$ | 8 | 1 | Y4 Autumn Test 3, Y4 Spring Test 4 |
| 5 | $2^{2}=\square$ | 4 | 1 | Y5 Autumn Test 4 |
| 6 | $84 \div 12=\square$ | 7 | 1 | Y4 Summer Test 2 |
| 7 | $11 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 8 | $72 \div 3=\square$ | 24 | 1 | Y4 Autumn Test 2 |
| 9 | $\square=45 \div 1$ | 45 | 1 | Y4 Autumn Test 6 |
| 10 | $642-353=\square$ | 289 | 1 | Y4 Spring Test 3 |
| 11 | $7 \div 10=\square$ | 0.7 | 1 | Y5 Autumn Test 1 |
| 12 | $315 \times 4=\square$ | 1260 | 1 | Y4 Summer Test 1 |
| 13 | $\frac{11}{6}-\frac{4}{6}=\square$ | $1 \frac{1}{6}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 14 | $74 \times 7=\square$ | 518 | 1 | Y4 Autumn Test 1 |
| 15 | $74 \div 100=\square$ | 0.74 | 1 | Y5 Autumn Test 1 |
| 16 | $\square=304-126$ | 178 | 1 | Y5 Autumn Test 3 |
| 17 | $7173+1968=\square$ | 9141 | 1 | Y4 Spring Test 1 |
| 18 | $\frac{3}{5}+\frac{4}{5}=\square$ | $1 \frac{2}{5}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 19 | $\square=33 \times 5 \times 6$ | 990 | 1 | Y4 Summer Test 3 |
| 20 | $9^{2}=\square$ | 81 | 1 | Y5 Autumn Test 4 |
| 21 | $4 \times \square=76$ | 19 | 1 | Y4 Autumn Test 2, <br> Y4 Autumn Test 3 |
| 22 | $42 \div 10=\square$ | 4.2 | 1 | Y5 Autumn Test 1 |
| 23 | $395=\square-416$ | 811 | 1 | Y4 Spring Test 1, Y3 Autumn Test 1 |
| 24 | $7000-2613=\square$ | 4387 | 1 | Y5 Autumn Test 3 |
| 25 | $\square=7^{2}$ | 49 | 1 | Y5 Autumn Test 4 |
| Total marks |  |  | 25 |  |

## Autumn Test 4

Name:
Class:
Date:


| 2 | $\frac{1}{3}$ of $60=\square$ |  |
| :--- | :--- | :--- |




## Autumn Test 4 (continued)



## How well did you do?

Colour the numbers of the questions you got correct.

| - with zeros | 16 | 24 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Square numbers | 5 | 20 | 25 |  |  |  |  |  |  |
| $\times$ by $0 ; \times$ or $\div$ by 1 | 3 | 7 | 9 |  |  |  |  |  |  |
| $\div$ by 10 or 100 | 11 | 15 | 22 |  |  |  |  |  |  |
| Short $\times$ | 12 | 14 | 19 |  |  |  |  |  |  |
| Short $\div$ | 8 | 21 |  |  |  |  |  |  |  |
| Fractions | 2 | 13 | 18 |  |  |  |  |  |  |
| Missing numbers | 4 | 21 | 23 |  |  |  |  |  |  |
| + | 17 | 18 | 23 |  |  |  |  |  |  |
| - | 10 | 13 | 16 | 24 |  |  |  |  |  |
| $x$ | 1 | 3 | 5 | 7 | 12 | 14 | 19 | 20 | 25 |
| $\div$ | 2 | 4 | 6 | 8 | 9 | 11 | 15 | 21 | 22 |

## Autumn Test 5

Teacher guidance
Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100

Multiplication by 0 ; multiplication and division by 1 ; square numbers

- Formal written method for short multiplication (to HTO) and short division (to TO)
- Division of two-digit numbers by 10 or 100
- Missing number statements with all four operations
- Multiplication of three numbers


## New: Multiplication and division of whole numbers by 10,100 or 1000

## A suggestion for teaching the multiplication of whole numbers by 10, 100 or 1000

Step 1 Display $4 \times 100=$
tep 2 Explain that another way to say this is 4 hundreds, which is written as 400.
tep 3 Extend this to $54 \times 100$ is 54 hundreds, which is written as 5400 .

Apply the same logic for multiplying by 10 and 1000 .

A suggestion for teaching the division of whole numbers by $\mathbf{1 0 , 1 0 0}$ or $\mathbf{1 0 0 0}$


Display $85 \div 1000=$

Explain that another way to write $85 \div 1000$ is $\frac{85}{1000}$, where the line represents the division sign and the number says 'eighty-five thousandths'.

Explain that another way to write eighty-five thousandths is to use a decimal point. Display HTO.t h th and explain that t stands for tenths, h for hundredths and th for thousandths. $\frac{85}{1000}=0.085$

Repeat with similar calculations
(e.g. $6 \div 1000=\frac{6}{1000}=0.006$ ).

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\square=\frac{1}{4}$ of 8 | 2 | 1 | Y2 Summer Test 1 |
| 2 | $17 \times 1=\square$ | 17 | 1 | Y4 Autumn Test 6 |
| 3 | $\square \div 3=6$ | 18 | 1 | Y4 Autumn Test 3, Y3 Spring Test 1 |
| 4 | $361+254=\square$ | 615 | 1 | Y4 Spring Test 1 |
| 5 | $\frac{7}{10}-\frac{4}{10}=\square$ | $\frac{3}{10}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 6 | $\square=26 \times 0$ | 0 | 1 | Y4 Autumn Test 4 |
| 7 | $731-325=\square$ | 406 | 1 | Y4 Spring Test 3 |
| 8 | $90 \div 6=\square$ | 15 | 1 | Y4 Autumn Test 2 |
| 9 | $5^{2}=\square$ | 25 | 1 | Y5 Autumn Test 4 |
| 10 | $24=\square \times 2$ | 12 | 1 | Y4 Autumn Test 3, Y2 Spring Test 1 |
| 11 | $424 \times 3=\square$ | 1272 | 1 | Y4 Summer Test 1 |
| 12 | $702-344=\square$ | 358 | 1 | Y5 Autumn Test 3 |
| 13 | $1 \div 10=\square$ | 0.1 | 1 | Y5 Autumn Test 1 |
| 14 | $6320+1993=\square$ | 8313 | 1 | Y4 Spring Test 1 |
| 15 | $\square=6{ }^{2}$ | 36 | 1 | Y5 Autumn Test 4 |
| 16 | $\frac{4}{11}+\frac{10}{11}=\square$ | $1 \frac{3}{11}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 17 | $5 \times 17 \times 4=\square$ | 340 | 1 | Y4 Summer Test 3 |
| 18 | $62 \div 100=\square$ | 0.62 | 1 | Y5 Autumn Test 1 |
| 19 | $7428-2848=\square$ | 4580 | 1 | Y4 Spring Test 3 |
| 20 | $74 \times 100=\square$ | 7400 | 1 | Y5 Autumn Test 5 |
| 21 | $4 \times \square=92$ | 23 | 1 | Y4 Autumn Test 2 Y4 Autumn Test 3 |
| 22 | $2828=\square-4213$ | 7041 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 23 | $85 \div 10=\square$ | 8.5 | 1 | Y5 Autumn Test 1 |
| 24 | $4000-1321=\square$ | 2679 | 1 | Y5 Autumn Test 3 |
| 25 | $\square=735 \div 1000$ | 0.735 | 1 | Y5 Autumn Test 5 |
| Total marks |  |  | 25 |  |

## Autumn Test 5

Name:

Class:
Date:


## Autumn Test 5 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 12 | 24 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiples of tables | 20 |  |  |  |  |  |  |  |
| Square numbers | 9 | 15 |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 13 | 18 | 20 | 23 | 25 |  |  |  |
| Short $x$ | 11 |  |  |  |  |  |  |  |
| Short $\div$ | 8 | 21 |  |  |  |  |  |  |
| Fractions | 1 | 5 | 16 |  |  |  |  |  |
| Missing numbers | 3 | 10 | 21 | 22 |  |  |  |  |
| + | 4 | 14 | 16 | 22 |  |  |  |  |
| - | 5 | 7 | 12 | 19 | 24 |  |  |  |
| $x$ | 2 | 3 | 6 | 9 | 11 | 15 | 17 | 20 |
| $\div$ | 1 | 8 | 10 | 13 | 18 | 21 | 23 | 25 |

## YEAR 5 ARITHMETIC PRACTICE TESTS

## Autumn Test 6

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 ; square numbers
- Formal written method for short multiplication (to HTO) and short division (to TO)
- Multiplication and division of whole numbers by 10, 100 or 1000
- Missing number statements with all four operations

| Question <br> number | Question | Answer | Marks | Related test |
| :---: | :--- | :---: | :---: | :--- |
| 1 | $\frac{1}{3}$ of $6=\square$ | 2 | 1 | Y2 Summer Test 5 |$|$| $\square$ |
| :---: |
| 2 |
| $\square \times 10=70$ |

## Autumn Test 6

Name:
Class:
Date:


## Autumn Test 6 (continued)



## Total marks

How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 8 | 22 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiples of tables | 11 | 18 |  |  |  |  |  |  |  |  |
| Square numbers | 13 | 17 |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 2 | 10 | 18 | 24 |  |  |  |  |  |  |
| Short $x$ | 12 | 23 |  |  |  |  |  |  |  |  |
| Short $\div$, including $r$ | 21 | 25 |  |  |  |  |  |  |  |  |
| Fractions | 1 | 5 | 16 | 20 |  |  |  |  |  |  |
| Missing numbers | 2 | 15 | 17 | 23 |  |  |  |  |  |  |
| + | 7 | 15 | 16 | 19 |  |  |  |  |  |  |
| - | 4 | 5 | 8 | 22 |  |  |  |  |  |  |
| $x$ | 6 | 11 | 12 | 13 | 14 | 18 | 20 | 23 |  |  |
| $\div$ | 1 | 2 | 3 | 9 | 10 | 17 | 20 | 21 | 24 | 25 |

## Spring Test 1

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 ; square numbers
- Formal written method for short multiplication (to HTO) and short division (to TO), including with remainders
- Multiplication and division of whole numbers by 10,100 or 1000
- Missing number statements with all four operations


## New: Cube numbers

## A teaching suggestion

step 1
Give the children cubes to use. Discuss the properties of a cube and agree that all the faces are square and that all the edges are the same length.
tep 2 Use eight single cubes to build a $2 \times 2 \times 2$ cube and count the cubes that you used. Show that it has two rows, two columns and two layers, and that $2 \times 2 \times 2=8$.
step 3 Ask the children to investigate other cubes that they can build and to make a table of their results.

| Rows | Columns | Layers | Number of <br> cubes |
| :---: | :---: | :---: | :---: |
| 2 | 2 | 2 | 8 |
|  |  |  |  |

Collect and display the results and explain that these numbers are called 'cube numbers' because they make a cube! (Using cubes to investigate cube numbers makes the concept and mathematical vocabulary more memorable for children.)

5
Introduce the notation $3^{3}$ for 3 multiplied by itself 3 times (hence the ${ }^{3}$ ) where $3^{3}=3 \times 3 \times 3=27$.

| Question | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $19 \times 1=\square$ | 19 | 1 | Y4 Autumn Test 6 |
| 2 | $\square=35 \div 7$ | 5 | 1 | Y4 Spring Test 6 |
| 3 | $473 \times 100=\square$ | 47300 | 1 | Y5 Autumn Test 5 |
| 4 | $4^{2}=\square$ | 16 | 1 | Y5 Autumn Test 4 |
| 5 | $701-523=\square$ | 178 | 1 | Y5 Autumn Test 3 |
| 6 | $9 \div 10=\square$ | 0.9 | 1 | Y5 Autumn Test 5 |
| 7 | $2 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 8 | $\frac{17}{10}-\frac{9}{10}=\square$ | $\frac{8}{10}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 9 | $\square=28 \div 1$ | 28 | 1 | Y4 Autumn Test 6 |
| 10 | $12^{2}=\square$ | 144 | 1 | Y5 Autumn Test 4 |
| 11 | $\square \times 6=72$ | 12 | 1 | Y4 Autumn Test 3 , Y4 Spring Test 4 |
| 12 | $444=732-\square$ | 288 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 13 | $\frac{2}{4}$ of $20=\square$ | 10 | 1 | Y3 Autumn Test 4 |
| 14 | $6314+2789=\square$ | 9103 | 1 | Y4 Spring Test 1 |
| 15 | $\frac{5}{6}+\frac{5}{6}=\square$ | $1 \frac{4}{6}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 16 | $400 \times 8=\square$ | 3200 | 1 | Y4 Summer Test 5, Y3 Summer Test 3 |
| 17 | $\square=\frac{1}{3}$ of 42 | 14 | 1 | Y2 Summer Test 5 |
| 18 | $146 \times 7=\square$ | 1022 | 1 | Y4 Summer Test 1 |
| 19 | $6512-1826=\square$ | 4686 | 1 | Y4 Spring Test 3 |
| 20 | $98 \div 6=\square$ | 16 r 2 | 1 | Y5 Autumn Test 6 |
| 21 | $5 \times 46 \times 2=\square$ | 460 | 1 | Y4 Summer Test 3 |
| 22 | $48=\square \div 8$ | 384 | 1 | Y4 Autumn Test 3 , Y3 Summer Test 3 |
| 23 | $2^{3}=\square$ | 8 | 1 | Y5 Spring Test 1 |
| 24 | $\square+492=781$ | 289 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 25 | $324 \div 100=\square$ | 3.24 | 1 | Y5 Autumn Test 5 |
| 26 | $896 \times 9=\square$ | 8064 | 1 | Y4 Summer Test 1 |
| 27 | $8000-2145=\square$ | 5855 | 1 | Y5 Autumn Test 3 |
| 28 | $\square=5^{3}$ | 125 | 1 | Y5 Spring Test 1 |
| Total marks |  |  | 28 |  |

## Spring Test 1

Name: :

Class: $\qquad$ Date:


| 15 | $\frac{5}{6}+\frac{5}{6}=\square$ |  |
| :--- | :--- | :--- |
|  |  | $\square$ |

## Spring Test 1 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 5 | 27 |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiples of tables | 16 |  |  |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 4 | 10 | 23 | 28 |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 3 | 6 | 25 |  |  |  |  |  |  |  |  |  |
| Short $x$ | 18 | 22 | 26 |  |  |  |  |  |  |  |  |  |
| Short $\div$ including $r$ | 17 | 20 |  |  |  |  |  |  |  |  |  |  |
| Fractions | 8 | 13 | 15 | 17 |  |  |  |  |  |  |  |  |
| Missing numbers | 11 | 12 | 22 | 24 |  |  |  |  |  |  |  |  |
| + | 14 | 15 |  |  |  |  |  |  |  |  |  |  |
| - | 5 | 8 | 12 | 19 | 24 | 27 |  |  |  |  |  |  |
| $x$ | 1 | 3 | 4 | 7 | 10 | 13 | 16 | 18 | 21 | 23 | 26 | 28 |
| $\div$ | 2 | 6 | 9 | 11 | 13 | 17 | 20 | 22 | 25 |  |  |  |
| $\div$ |  |  |  |  |  |  |  |  |  |  |  |  |

# Spring Test 2 

Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 ; square numbers
- Formal written method for short multiplication (to HTO) and short division (to TO), including with remainders
- Multiplication and division of whole numbers by 10,100 or 1000
- Missing number statements with all four operations


## New: Multiplication and division of decimals by 10,100 or 1000

## A teaching suggestion

Step 1
Use a fixed decimal point and digit cards that can be moved to illustrate the method.

When multiplying by 10,100 and 1000 , the digits in the number move left to give an answer that is bigger than the original number. When dividing by 10,100 and 1000 , the digits in the number move right to give an answer that is smaller than the original number.
tep 3
Display $4.56 \times 1000$. Establish that the number will become 1000 times bigger. This means that the digits in the number move three columns to the left.
Move $1=45.6$
Move $2=456$.
Move $3=456$ . so the empty space is filled with a zero giving 4560. which is shown as
Th HTO.th becomes
Th HTO.th
4.56

4560
Step 4 Display $8.3 \div 100$. Establish that there are two moves and the division sign means the digits move to the right to make the number smaller.
Move $1=0.83$
Move $2=0.083$ which is shown as
Th HTO.th becomes Th HTO.thth

$$
8.3
$$

0.083
tep 5 Complete lots of examples with the children, and then encourage them to work with a partner before trying the work independently.

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $0 \times 6=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 2 | $\square=13 \times 1$ | 13 | 1 | Y4 Autumn Test 6 |
| 3 | $32 \times 10=\square$ | 320 | 1 | Y5 Autumn Test 5 |
| 4 | $4 \div 10=\square$ | 0.4 | 1 | Y5 Autumn Test 5 |
| 5 | $7 \times \square=21$ | 3 | 1 | Y4 Autumn Test 3, Y4 Spring Test 6 |
| 6 | $\frac{10}{4}-\frac{6}{4}=\square$ | 1 (or equiv) | 1 | Y5 Autumn Test 2 |
| 7 | $100 \div 1=\square$ | 100 | 1 | Y4 Autumn Test 6 |
| 8 | $315+486=\square$ | 801 | 1 | Y4 Spring Test 1 |
| 9 | $\square \times 400=1600$ | 4 | 1 | Y4 Autumn Test 3, Y4 Summer Test 5 |
| 10 | $\square=7139-2436$ | 4703 | 1 | Y4 Spring Test 3 |
| 11 | $6^{2}=\square$ | 36 | 1 | Y5 Autumn Test 4 |
| 12 | $73 \times 1000=\square$ | 73000 | 1 | Y5 Autumn Test 5 |
| 13 | $900-702=\square$ | 198 | 1 | Y5 Autumn Test 3 |
| 14 | $365 \times 8=\square$ | 2920 | 1 | Y4 Summer Test 1 |
| 15 | $\square=2700 \div 3$ | 900 | 1 | Y4 Summer Test 5 |
| 16 | $7873+1948=\square$ | 9821 | 1 | Y4 Spring Test 1 |
| 17 | $75 \div 2=\square$ | 37 r1 | 1 | Y5 Autumn Test 6 |
| 18 | $\frac{4}{7}+\frac{6}{7}=\square$ | $1 \frac{3}{7}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 19 | $730=\square \times 5$ | 146 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| 20 | $21 \times 5 \times 8=\square$ | 840 | 1 | Y4 Summer Test 3 |
| 21 | $3^{3}=\square$ | 27 | 1 | Y5 Spring Test 1 |
| 22 | $9621-\square=3288$ | 6333 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 23 | $6.1 \times 100=\square$ | 610 | 1 | Y5 Spring Test 2 |
| 24 | $94 \div 7=\square$ | 13 r 3 | 1 | Y5 Autumn Test 6 |
| 25 | $\square=8^{2}$ | 64 | 1 | Y5 Autumn Test 4 |
| 26 | $9=198 \div \square$ | 22 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| 27 | $4004-1265=\square$ | 2739 | 1 | Y5 Autumn Test 3 |
| 28 | $26.3 \div 100=\square$ | 0.263 | 1 | Y5 Spring Test 2 |
| Total marks |  |  | 28 |  |

## Spring Test 2

## Name:

Class: $\qquad$ Date: $\qquad$


## Spring Test 2 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 13 | 27 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Multiples of tables | 9 | 15 |  |  |  |  |  |  |  |  |
| Square and cube numbers | 11 | 21 | 25 |  |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 3 | 4 | 12 | 23 | 28 |  |  |  |  |  |
| Short $x$ | 14 |  |  |  |  |  |  |  |  |  |
| Short $\div$ including r | 17 | 19 | 24 | 26 |  |  |  |  |  |  |
| Fractions | 6 | 18 |  |  |  |  |  |  |  |  |
| Missing numbers | 5 | 9 | 19 | 22 | 26 |  |  |  |  |  |
| + | 8 | 16 | 18 |  |  |  |  |  |  |  |
| - | 6 | 10 | 13 | 22 | 27 |  |  |  |  |  |
| $x$ | 1 | 2 | 3 | 11 | 12 | 14 | 20 | 21 | 23 | 25 |
| $\div$ | 4 | 5 | 7 | 9 | 15 | 17 | 19 | 24 | 26 | 28 |

## Spring Test 3

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 ; square and cube numbers
- Formal written method for short multiplication (to HTO) and short division (to TO), including with remainders
- Multiplication and division of whole numbers or decimals by 10,100 or 1000
- Missing number statements with all four operations


## New: Multiplication of up to four digits by a single-digit number

## A teaching suggestion

tep 1 The children are already familiar with HTO $\times$ O (see Y4 Summer Test 1).
Display:
7587
$\times \quad 5$
tep 2 Remind the children to work with the ones column first. $5 \times 7$ is 35 , so write the 35 with the 3 in the tens column and the 5 in the ones column (so it still reads as 35 ).

7587
$\times \begin{array}{r}5 \\ -\quad 5 \\ \hline\end{array}$
3 Next multiply the tens by 5, giving 40 tens, and then add in the extra 3 , giving 43 tens. Write the answer, making sure it still reads as 43.

| 7587 |
| ---: |
| $\times \quad 5$ |
| 35 |

${ }^{\text {tep }} 4$
Complete the calculation in the same way. After the last multiplication, put the carry figure of 3 into the answer line, giving the final answer 37935 .

Do lots of examples with the children, then encourage them to work with a partner to complete similar calculations. When they are confident, let them work independently.

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $5 \div 1=\square$ | 5 | 1 | Y4 Autumn Test 6 |
| 2 | $\square=6 \times 3$ | 18 | 1 | Y4 Spring Test 4 |
| 3 | $10 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 4 | $1^{3}=\square$ | 1 | 1 | Y5 Spring Test 1 |
| 5 | $4000 \div 100=\square$ | 40 | 1 | Y5 Autumn Test 5 |
| 6 | $36 \times 1=\square$ | 36 | 1 | Y4 Autumn Test 6 |
| 7 | $4=\square \div 7$ | 28 | 1 | Y4 Autumn Test 3, Y4 Spring Test 6 |
| 8 | $681-268=\square$ | 413 | 1 | Y4 Spring Test 3 |
| 9 | $\square=\frac{6}{9}+\frac{4}{9}$ | $1 \frac{1}{9}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 10 | $7^{2}=\square$ | 49 | 1 | Y5 Autumn Test 4 |
| 11 | $8 \times 12=\square$ | 96 | 1 | Y4 Summer Test 2, Y3 Summer Test 3 |
| 12 | $600-251=\square$ | 349 | 1 | Y5 Autumn Test 3 |
| 13 | $900 \times 4=\square$ | 3600 | 1 | Y4 Summer Test 5 |
| 14 | $100=\square^{2}$ | 10 | 1 | Y5 Autumn Test 4 |
| 15 | $53 \div 4=\square$ | 13 r 1 | 1 | Y5 Autumn Test 6 |
| 16 | $6175 \times 2=\square$ | 12350 | 1 | Y5 Spring Test 3 |
| 17 | $4281+\square=6153$ | 1872 | 1 | Y4 Spring Test 1 , Y3 Autumn Test 1 |
| 18 | $6 \times 41 \times 5=\square$ | 1230 | 1 | Y4 Summer Test 3 |
| 19 | $4^{3}=\square$ | 64 | 1 | Y5 Spring Test 1 |
| 20 | $\square=\frac{3}{4}$ of 84 | 63 | 1 | Y3 Autumn Test 4 |
| 21 | $6.24 \times 10=\square$ | 62.4 | 1 | Y5 Spring Test 2 |
| 22 | $3847=\square-1965$ | 5812 | 1 | Y4 Spring Test 1, Y3 Autumn Test 1 |
| 23 | $4185 \times 5=\square$ | 20925 | 1 | Y5 Spring Test 3 |
| 24 | $98 \div 8=\square$ | 12 r 2 | 1 | Y5 Autumn Test 6 |
| 25 | $4002-1463=\square$ | 2539 | 1 | Y5 Autumn Test 3 |
| 26 | $9 \times \square=234$ | 26 | 1 | Y4 Autumn Test 2, <br> Y4 Autumn Test 3 |
| 27 | $\square=63.2 \div 1000$ | 0.0632 | 1 | Y5 Spring Test 2 |
| 28 | $7346 \times 6=\square$ | 44076 | 1 | Y5 Spring Test 3 |
| Total marks |  |  | 28 |  |

## Spring Test 3

Name:

Class: $\qquad$ Date:


| 15 | $4 \longdiv { 5 3 }$ |  |
| :--- | :--- | :--- |
|  |  | $\square$ |

## Spring Test 3 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| - with zeros | 12 | 25 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Multiples of tables | 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 4 | 10 | 14 | 19 |  |  |  |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 5 | 21 | 27 |  |  |  |  |  |  |  |  |  |  |  |  |
| Short $x$ | 16 | 18 | 23 | 28 |  |  |  |  |  |  |  |  |  |  |  |
| Short $\div$ including $r$ | 15 | 24 | 26 |  |  |  |  |  |  |  |  |  |  |  |  |
| Fractions | 9 | 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missing numbers | 7 | 14 | 17 | 22 | 26 |  |  |  |  |  |  |  |  |  |  |
| + | 9 | 22 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - | 8 | 12 | 17 | 25 |  |  |  |  |  |  |  |  |  |  |  |
| $x$ | 2 | 3 | 4 | 6 | 7 | 10 | 11 | 13 | 16 | 18 | 19 | 20 | 21 | 23 | 28 |
| $\div$ | 1 | 5 | 14 | 15 | 20 | 24 | 26 | 27 |  |  |  |  |  |  |  |

# Spring Test 4 

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers up to four digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication by 0 ; multiplication and division by 1 ; square and cube numbers
- Multiplication of three numbers
- Short multiplication of up to four digits by a single-digit number
- Short division (to TO), including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Missing number statements with all four operations


## New: Addition and subtraction of whole numbers with more than four digits (and different numbers of digits)

## A teaching suggestion

Review the addition of two four-digit numbers using columns for the written calculation (e.g. $1528+3379=4907$ ).
tep 2 Display $86457+855$ and discuss how to set this out. Establish that the ones need to be added together, then the tens and so on; therefore, the numbers need to be in the correct columns. Display this:

$$
86457
$$

$$
+\quad 855
$$

tep 3
Work through the calculation, emphasising that you start at the ones and work to the left. Remind the children that, when the answer to a column is greater than one digit, the number is written with the first digit underneath the next column, but so it still reads as the same number.

Step 4 Display the completed calculation:

$$
\begin{array}{r}
86457 \\
+\quad 855 \\
\hline 87312 \\
\hline 111
\end{array}
$$

Work through lots of examples with the children, and then encourage them to work with a partner before trying the calculations independently.

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\square=6 \times 11$ | 66 | 1 | Y4 Autumn Test 5 |
| 2 | $53 \times 1=\square$ | 53 | 1 | Y4 Autumn Test 6 |
| 3 | $72=\square+33$ | 39 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 4 | $1^{2}=\square$ | 1 | 1 | Y5 Autumn Test 4 |
| 5 | $60 \times 10=\square$ | 600 | 1 | Y5 Autumn Test 5 |
| 6 | $820-267=\square$ | 553 | 1 | Y4 Spring Test 3 |
| 7 | $22 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 8 | $700-219=\square$ | 481 | 1 | Y5 Autumn Test 3 |
| 9 | $11^{2}=\square$ | 121 | 1 | Y5 Autumn Test 4 |
| 10 | $\square=362-28$ | 334 | 1 | Y5 Spring Test 4 |
| 11 | $\frac{3}{7}+\frac{6}{7}=\square$ | $1 \frac{2}{7}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 12 | $\square=84 \div 7$ | 12 | 1 | Y4 Spring Test 6 |
| 13 | $6^{3}=\square$ | 216 | 1 | Y5 Spring Test 1 |
| 14 | $5 \times 721 \times 2=\square$ | 7210 | 1 | Y4 Summer Test 3 |
| 15 | $7136 \times 3=\square$ | 21408 | 1 | Y5 Spring Test 3 |
| 16 | $836-\square=428$ | 408 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 17 | $463.2 \div 100=\square$ | 4.632 | 1 | Y5 Spring Test 2 |
| 18 | $\square^{3}=0$ | 0 | 1 | Y5 Spring Test 1 |
| 19 | $91 \div 5=\square$ | 18 r 1 | 1 | Y5 Autumn Test 6 |
| 20 | $6000-4121=\square$ | 1879 | 1 | Y5 Autumn Test 3 |
| 21 | $50 \div 3=\square$ | 16 r 2 | 1 | Y5 Autumn Test 6 |
| 22 | $642=\square \div 9$ | 5778 | 1 | Y4 Autumn Test 3, Y4 Summer Test 1 |
| 23 | $3629+84=\square$ | 3713 | 1 | Y5 Spring Test 4 |
| 24 | $85 \div 6=\square$ | 14 r 1 | 1 | Y5 Autumn Test 6 |
| 25 | $414=6 \times \square$ | 69 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| 26 | $7.1 \times 1000=\square$ | 7100 | 1 | Y5 Spring Test 2 |
| 27 | $2369 \times 7=\square$ | 16583 | 1 | Y5 Spring Test 3 |
| 28 | $\square=364+25+3182$ | 3571 | 1 | Y5 Spring Test 4 |
| Total marks |  |  | 28 |  |

## Spring Test 4

Name:
Class:
Date:


## Spring Test 4 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 10 | 23 | 28 |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - with zeros | 6 | 8 | 20 |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 5 |  |  |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 4 | 9 | 13 | 18 |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 5 | 17 | 26 |  |  |  |  |  |  |  |  |  |
| Short $x$ | 15 | 27 |  |  |  |  |  |  |  |  |  |  |
| Short $\div$, including r | 19 | 21 | 22 | 24 | 25 |  |  |  |  |  |  |  |
| Fractions | 11 |  |  |  |  |  |  |  |  |  |  |  |
| Missing numbers | 3 | 16 | 18 | 22 | 25 |  |  |  |  |  |  |  |
| + | 11 | 23 | 28 |  |  |  |  |  |  |  |  |  |
| - | 3 | 6 | 8 | 10 | 16 | 20 |  |  |  |  |  |  |
| $\mathbf{x}$ | 1 | 2 | 4 | 5 | 7 | 9 | 13 | 14 | 15 | 22 | 26 | 27 |
| $\div$ | 12 | 17 | 18 | 19 | 21 | 24 | 25 |  |  |  |  |  |

## Spring Test 5

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with different numbers of digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers


## New: Division of a four-digit number by a single-digit number

## A teaching suggestion

tep 1 The children are already familiar with $\mathrm{TO} \div 0$ (see Y4 Autumn Test 2). Display $6745 \div 5$ and then set out the sum for formal division.

$$
5 \longdiv { 6 7 4 5 }
$$

tep 2 First ask:'How many 5 (thousands) in 6 (thousands)?' Agree that 6 (thousands) have one group of 5 (thousand) and 1 (thousand) left over. Write this in, demonstrating where to write the digit in the thousands column and the remainder in the hundreds column.
sep 3 Now ask:'How many 5 (hundreds) in 17 (hundreds)?' Agree that there are three groups of 5 (hundred) and 2 (hundred) left over. Continue until the sum is completed.

$$
\begin{array}{lllll} 
& 1 & 3 & 4 & 9 \\
& { }^{17} 7^{2} 4 & 4 & 45
\end{array}
$$

Complete lots of examples with the children, including some with remainders. Encourage them to work with a partner before trying the work independently.

- Multiplication by 0 ; multiplication and division by 1 ; square and cube numbers
- Short multiplication of up to four digits by a single-digit number
- Short division (to TO), including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $12 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 2 | $\square=63 \div 9$ | 7 | 1 | Y4 Spring Test 2 |
| 3 | $3^{2}=\square$ | 9 | 1 | Y5 Autumn Test 4 |
| 4 | $4000 \div 10=\square$ | 400 | 1 | Y5 Autumn Test 5 |
| 5 | $621-350=\square$ | 271 | 1 | Y4 Spring Test 3 |
| 6 | $\square=15 \div 1$ | 15 | 1 | Y4 Autumn Test 6 |
| 7 | $56=\square \times 7$ | 8 | 1 | Y4 Autumn Test 3, Y4 Spring Test 6 |
| 8 | $\frac{15}{10}-\frac{1}{10}=\square$ | $1 \frac{4}{10}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 9 | $76.4 \div 100=\square$ | 0.764 | 1 | Y5 Spring Test 2 |
| 10 | $4^{3}=\square$ | 64 | 1 | Y5 Spring Test 1 |
| 11 | $635-82=\square$ | 553 | 1 | Y5 Spring Test 4 |
| 12 | $\square \div 8=125$ | 1000 | 1 | Y4 Autumn Test 3 , Y4 Summer Test 1 |
| 13 | $1453 \times 4=\square$ | 5812 | 1 | Y5 Spring Test 3 |
| 14 | $396=\square-185$ | 581 | 1 | Y4 Spring Test 1, Y3 Autumn Test 1 |
| 15 | $64 \div 3=\square$ | 21 r 1 | 1 | Y5 Autumn Test 6 |
| 16 | $\square=12 \times 500$ | 6000 | 1 | Y4 Summer Test 2, Y4 Summer Test 5 |
| 17 | $7852 \div 2=\square$ | 3926 | 1 | Y5 Spring Test 5 |
| 18 | $8 \times 5 \times 26=\square$ | 1040 | 1 | Y4 Summer Test 3 |
| 19 | $7002-2304=\square$ | 4698 | 1 | Y5 Autumn Test 3 |
| 20 | $90 \div 7=\square$ | 12 r 6 | 1 | Y5 Autumn Test 6 |
| 21 | $7328-79=\square$ | 7249 | 1 | Y5 Spring Test 4 |
| 22 | $342+\square=911$ | 569 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 23 | $\square=63.4 \times 100$ | 6340 | 1 | Y5 Spring Test 2 |
| 24 | $8845 \div 5=\square$ | 1769 | 1 | Y5 Spring Test 5 |
| 25 | $4348 \times 9=\square$ | 39132 | 1 | Y5 Spring Test 3 |
| 26 | $\square^{2}=25$ | 5 | 1 | Y5 Autumn Test 4 |
| 27 | $63+2986+8=\square$ | 3057 | 1 | Y5 Spring Test 4 |
| 28 | $4632 \div 6=\square$ | 772 | 1 | Y5 Spring Test 5 |
| Total marks |  |  | 28 |  |

## Spring Test 5

Name:

$\qquad$

Class: $\qquad$ Date:


| 15 | $3 \longdiv { 6 4 }$ |  |
| :---: | :---: | :---: |
|  |  | $\square$ |

## Spring Test 5 (continued)

| 17 | $2 \longdiv { 7 8 5 2 }$ |  |
| :--- | :--- | :--- |


| 18 | $8 \times 5 \times 26=\square$ |  |
| :--- | :--- | :--- |


| 19 | 7002  <br> -2304  <br>   <br>   |
| :--- | ---: | :--- |



## Total marks

How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 11 | 21 | 27 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - with zeros | 19 |  |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 4 | 16 |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 3 | 10 | 26 |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 4 | 9 | 23 |  |  |  |  |  |  |  |  |
| Short $x$ | 12 | 13 | 18 | 25 |  |  |  |  |  |  |  |
| Short $\div$, including $r$ | 15 | 17 | 20 | 24 | 28 |  |  |  |  |  |  |
| Fractions | 8 |  |  |  |  |  |  |  |  |  |  |
| Missing numbers | 7 | 12 | 14 | 22 | 26 |  |  |  |  |  |  |
| + | 14 | 27 |  |  |  |  |  |  |  |  |  |
| - | 5 | 8 | 11 | 19 | 21 | 22 |  |  |  |  |  |
| $\times$ | 1 | 3 | 10 | 12 | 13 | 16 | 18 | 23 | 25 |  |  |
| $\div$ | 2 | 4 | 6 | 7 | 9 | 15 | 17 | 20 | 24 | 26 | 28 |

# Spring Test 6 

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with different numbers of digits
- Addition and subtraction of fractions with the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1 ; square and cube numbers

New: Addition and subtraction of fractions with multiples of the same denominator

## A teaching suggestion

Cut one circle into fifths and another into tenths. Compare the segments, demonstrating that two tenths are the same as one fifth, four tenths are the same as two fifths and so on.

Hold up fifth fractions and, on an agreed signal, ask the children to call out how many tenths they represent.
tep 3 When the children are confident, display:

$$
\frac{3}{5}+\frac{1}{10}=
$$

tep 4 Hold three fifths in one hand and one tenth in the other. Discuss the problem of adding them (they are not the same). Give the children an opportunity to discuss how to solve the problem. Agree that the three fifths can be changed for six tenths.

$$
\frac{3}{5}+\frac{1}{10}=\frac{6}{10}+\frac{1}{10}=
$$

The tenths are now straightforward to add, giving $\frac{7}{10}$.

Together, repeat lots of addition and subtraction examples using $\frac{1}{3}$ and $\frac{1}{6}$, $\frac{1}{4}$ and $\frac{1}{2}, \frac{1}{4}$ and $\frac{1}{8}$ and so on. Allow the children to work with a partner before working independently.

- Short multiplication of up to four digits by a single-digit number
- Short division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $2 \times 7=\square$ | 14 | 1 | Y4 Spring Test 6 |
| 2 | $\square \div 5=11$ | 55 | 1 | Y4 Autumn Test 3, Y4 Autumn Test 5 |
| 3 | $23 \times 100=\square$ | 2300 | 1 | Y5 Autumn Test 5 |
| 4 | $\square=713-305$ | 408 | 1 | Y4 Spring Test 3 |
| 5 | $20 \times 1=\square$ | 20 | 1 | Y4 Autumn Test 6 |
| 6 | $2^{3}=\square$ | 8 | 1 | Y5 Spring Test 1 |
| 7 | $\square=0 \times 70$ | 0 | 1 | Y4 Autumn Test 4 |
| 8 | $\frac{12}{8}-\frac{2}{8}=\square$ | $1 \frac{2}{8}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 9 | $78+284=\square$ | 362 | 1 | Y5 Spring Test 4 |
| 10 | $348=\square+176$ | 172 | 1 | Y4 Spring Test 1 , Y3 Autumn Test 1 |
| 11 | $6142 \times 3=\square$ | 18426 | 1 | Y5 Spring Test 3 |
| 12 | $58 \div 3=\square$ | 19 r 1 | 1 | Y5 Autumn Test 6 |
| 13 | $\frac{1}{3}+\frac{1}{6}=\square$ | $\frac{3}{6}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 14 | $\square=7^{2}$ | 49 | 1 | Y5 Autumn Test 4 |
| 15 | $1364-58=\square$ | 1306 | 1 | Y5 Spring Test 4 |
| 16 | $4 \times 37 \times 5=\square$ | 740 | 1 | Y4 Summer Test 3 |
| 17 | $\square=6004-2151$ | 3853 | 1 | Y5 Autumn Test 3 |
| 18 | $4122 \div 3=\square$ | 1374 | 1 | Y5 Spring Test 5 |
| 19 | $600 \times 9=\square$ | 5400 | 1 | Y4 Spring Test 4, Y4 Summer Test 5 |
| 20 | $\frac{4}{5}-\frac{1}{10}=\square$ | $\frac{7}{10}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 21 | $93 \div 6=\square$ | 15 r 3 | 1 | Y5 Autumn Test 6 |
| 22 | $5=1745 \div \square$ | 349 | 1 | Y5 Spring Test 5, Y4 Autumn Test 3 |
| 23 | $7.29 \div 10=\square$ | 0.729 | 1 | Y5 Spring Test 2 |
| 24 | $\square-169=651$ | 820 | 1 | Y4 Spring Test 1, Y3 Autumn Test 1 |
| 25 | $2773 \times 8=\square$ | 22184 | 1 | Y5 Spring Test 3 |
| 26 | $\square=7319+6+287$ | 7612 | 1 | Y5 Spring Test 4 |
| 27 | $6824 \div 8=\square$ | 853 | 1 | Y5 Spring Test 5 |
| 28 | $\frac{1}{4}+\frac{5}{12}=\square$ | $\frac{8}{12}$ (or equiv) | 1 | Y5 Spring Test 6 |
| Total marks |  |  | 28 |  |

## Spring Test 6

Name:
Class:
Date:

$13 \frac{1}{3}+\frac{1}{6}=$


## Spring Test 6 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 9 | 15 | 26 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - with zeros | 17 |  |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 19 |  |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 6 | 14 |  |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 3 | 23 |  |  |  |  |  |  |  |  |  |
| Short $x$ | 11 | 25 |  |  |  |  |  |  |  |  |  |
| Short $\div$, including $r$ | 12 | 18 | 21 | 22 | 27 |  |  |  |  |  |  |
| Fractions | 8 | 13 | 20 | 28 |  |  |  |  |  |  |  |
| Missing numbers | 2 | 10 | 22 | 24 |  |  |  |  |  |  |  |
| + | 9 | 13 | 24 | 26 | 28 |  |  |  |  |  |  |
| - | 4 | 8 | 10 | 15 | 17 | 20 |  |  |  |  |  |
| $\mathbf{x}$ | 1 | 2 | 3 | 5 | 6 | 7 | 11 | 14 | 16 | 19 | 25 |
| $\div$ | 12 | 18 | 21 | 22 | 23 | 27 |  |  |  |  |  |

## Summer Test 1

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of two numbers with different numbers of digits
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication by 0; multiplication and division by 1 ; square and cube numbers
- Multiplication of three numbers
- Short multiplication of up to four digits by a single-digit number
- Short division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10,100 or 1000
- Missing number statements with all four operations


## New: Addition and subtraction of whole numbers and mixed decimals

## A teaching suggestion

Step 1
Review the addition of two whole numbers with a different number of digits. Establish that the ones need to be added together, then the tens and so on, so the numbers need to be in the correct columns.

Step2 Display $4.65+56.4$ and discuss how this needs to be set out. Establish that the tenths and ones each need to be added together, and so the numbers need to be in the correct columns. Note how the decimal points are lined up.
4.65
$+56.4$

To avoid confusion, fill in the gaps with zeros.

$$
04.65
$$

$+56.40$
rep 3 Work through the calculation, emphasising that you start at the right and work across to the left. Remind the children that, when the answer to a column is greater than one digit, the number is written with the first digit under the next column but so it still reads as the same number. Display the completed calculation, emphasising the position of the decimal point.

$$
\begin{array}{r}
04.65 \\
\times 56.40 \\
\hline 61.05 \\
\hline 11
\end{array}
$$

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $2 \times 12=\square$ | 24 | 1 | Y4 Summer Test 2 |
| 2 | $24=39-\square$ | 15 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 3 | $18 \div 1=\square$ | 18 | 1 | Y4 Autumn Test 6 |
| 4 | $\square=3000 \div 1000$ | 3 | 1 | Y5 Autumn Test 5 |
| 5 | $18 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 6 | $982-184=\square$ | 798 | 1 | Y4 Spring Test 3 |
| 7 | $\frac{3}{5}+\frac{9}{5}=\square$ | $2 \frac{2}{5}$ (or equiv) | 1 | Y5 Autumn Test 2 |
| 8 | $\frac{3}{4}$ of $44=\square$ | 33 | 1 | Y3 Autumn Test 4 |
| 9 | $713=\square+421$ | 292 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 10 | $600 \times 4=\square$ | 2400 | 1 | Y4 Summer Test 5 |
| 11 | $12^{2}=\square$ | 144 | 1 | Y5 Autumn Test 4 |
| 12 | $\frac{1}{4}+\frac{3}{8}=\square$ | $\frac{5}{8}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 13 | $94 \div 5=\square$ | 18 r 4 | 1 | Y5 Autumn Test 6 |
| 14 | $\square=2 \times 622 \times 5$ | 6220 | 1 | Y4 Summer Test 3 |
| 15 | $3.4+2.65=\square$ | 6.05 | 1 | Y5 Summer Test 1 |
| 16 | $\square \times 7=3934$ | 562 | 1 | Y5 Spring Test 5, Y4 Autumn Test 3 |
| 17 | $4982+35=\square$ | 5017 | 1 | Y5 Spring Test 4 |
| 18 | $9^{3}=\square$ | 729 | 1 | Y5 Spring Test 1 |
| 19 | $\square=60 \times 90$ | 5400 | 1 | Y4 Summer Test 5 |
| 20 | $732-48.1=\square$ | 683.9 | 1 | Y5 Summer Test 1 |
| 21 | $6.132 \times 100=\square$ | 613.2 | 1 | Y5 Spring Test 2 |
| 22 | $7328 \div 4=\square$ | 1832 | 1 | Y5 Spring Test 5 |
| 23 | $3152=\square-5210$ | 8362 | 1 | Y3 Autumn Test 1, Y4 Spring Test 1 |
| 24 | $9000-3812=\square$ | 5188 | 1 | Y5 Autumn Test 3 |
| 25 | $\frac{3}{5}-\frac{2}{15}=\square$ | $\frac{7}{15}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 26 | $\square=2930-861$ | 2069 | 1 | Y5 Spring Test 4 |
| 27 | $5687 \times 7=\square$ | 39809 | 1 | Y5 Spring Test 3 |
| 28 | $26.5+8.6=\square$ | 35.1 | 1 | Y5 Summer Test 1 |
| 29 | $632=\square \div 9$ | 5688 | 1 | Y4 Autumn Test 3, Y4 Summer Test 1 |
| 30 | $8302 \div 7=\square$ | 1186 | 1 | Y5 Spring Test 5 |
| Total marks |  |  | 30 |  |

## Summer Test 1

Name:


| $4.4+2.65=\square$ |  |
| :--- | :--- | :--- | :--- |


| 47 |  |  |
| :---: | :---: | :---: | :---: |

Class:
Date:

$8 \quad \frac{3}{4}$ of $44=$ $\qquad$

$12 \frac{1}{4}+\frac{3}{8}=$


## Summer Test 1 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 15 | 17 | 20 | 26 | 28 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - with zeros | 24 |  |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 10 | 19 |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 11 | 18 |  |  |  |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 4 | 21 |  |  |  |  |  |  |  |  |  |
| Short $x$ | 27 | 29 |  |  |  |  |  |  |  |  |  |
| Short $\div$, including r | 13 | 16 | 22 | 30 |  |  |  |  |  |  |  |
| Fractions | 7 | 8 | 12 | 25 |  |  |  |  |  |  |  |
| Missing numbers | 2 | 9 | 16 | 23 | 29 |  |  |  |  |  |  |
| + | 7 | 12 | 15 | 17 | 23 | 28 |  |  |  |  |  |
| - | 2 | 6 | 9 | 20 | 24 | 25 | 26 |  |  |  |  |
| $x$ | 1 | 5 | 8 | 10 | 11 | 14 | 18 | 19 | 21 | 27 | 29 |
| $\div$ | 3 | 4 | 8 | 13 | 16 | 22 | 30 |  |  |  |  |

# Summer Test 2 

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of numbers with different numbers of digits, including decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0; multiplication and division by 1 ; square and cube numbers


## New: Long multiplication of up to four digits by a two-digit number

## A teaching suggestion

${ }^{\text {step }} 1$
Explain that the formal method of long multiplication is like doing three calculations but only having to write one! Display:

$$
\times \quad 25
$$

tep 2 Demonstrate that you start by multiplying by the ones for the first calculation, so $5 \times 341=1705$.
$\times \quad 25$
1705
tep 3 Explain that the second calculation is multiplying by the tens.
Emphasise that you are 25
$\times \quad 25$ multiplying by 20 (not 1705 by 2 ), so $20 \times 341=6820$. 6820
tep 4 Finally, demonstrate the third calculation where the answers to the 341 other two parts are added together, so

| 25 |
| ---: |
| $\times \quad 1705$ |
| +6820 |
| 8525 |
| 1 |

Step 5 Work through lots of examples with the children, and then allow them to work with a partner before trying the calculations independently.

- Short multiplication of up to four digits by a single-digit number
- Short division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $6 \times 11=\square$ | 66 | 1 | Y4 Autumn Test 5, Y4 Spring Test 4 |
| 2 | $32=\square+20$ | 12 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 3 | $55 \div 2=\square$ | 27 r1 | 1 | Y5 Autumn Test 6 |
| 4 | $\square=15 \times 0$ | 0 | 1 | Y4 Autumn Test 4 |
| 5 | $32 \times 1=\square$ | 32 | 1 | Y4 Autumn Test 6 |
| 6 | $200 \times 100=\square$ | 20000 | 1 | Y5 Autumn Test 5 |
| 7 | $35 \div 7=\square$ | 5 | 1 | Y4 Spring Test 6 |
| 8 | $\frac{16}{7}-\frac{2}{7}=\square$ | 2 (or equiv) | 1 | Y5 Autumn Test 2 |
| 9 | $\square=622-344$ | 278 | 1 | Y4 Spring Test 3 |
| 10 | $11^{2}=\square$ | 121 | 1 | Y5 Autumn Test 4 |
| 11 | $\frac{1}{2}+\frac{3}{4}=\square$ | $1 \frac{1}{4}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 12 | $84=\square \times 6$ | 14 | 1 | Y4 Autumn Test 3, Y4 Spring Test 2 |
| 13 | $8^{3}=\square$ | 512 | 1 | Y5 Spring Test 1 |
| 14 | $24.35+8.82=\square$ | 33.17 | 1 | Y5 Summer Test 1 |
| 15 | $4265 \times 6=\square$ | 25590 | 1 | Y5 Spring Test 3 |
| 16 | $7314 \div 2=\square$ | 3657 | 1 | Y5 Spring Test 5 |
| 17 | $\square=6+482+74$ | 562 | 1 | Y5 Spring Test 4 |
| 18 | $6 \times 321 \times 50=\square$ | 96300 | 1 | Y4 Summer Test 3 |
| 19 | $\frac{1}{6}+\frac{5}{12}=\square$ | $\frac{7}{12}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 20 | $\square=73.1-5.52$ | 67.58 | 1 | Y5 Summer Test 1 |
| 21 | $5004-1456=\square$ | 3548 | 1 | Y5 Autumn Test 3 |
| 22 | $36 \times 24=\square$ | 864 | 2* | Y5 Summer Test 2 |
| 23 | $3735-295=\square$ | 3440 | 1 | Y5 Spring Test 4 |
| 24 | $9.2 \div 1000=\square$ | 0.0092 | 1 | Y5 Spring Test 2 |
| 25 | $\square=46+8.7$ | 54.7 | 1 | Y5 Summer Test 1 |
| 26 | $3426-\square=1551$ | 1875 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 27 | $6012 \div 9=\square$ | 668 | 1 | Y5 Spring Test 5 |
| 28 | $715 \times 49=\square$ | 35035 | $2 *$ | Y5 Summer Test 2 |
| Total marks |  |  | 30 |  |

* award 1 mark if there is one error in the working


## Summer Test 2

Name:
Class:
Date:


## Summer Test 2 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 14 | 17 | 20 | 23 | 25 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
| - with zeros | 21 |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 6 | 18 |  |  |  |  |  |  |  |  |
| Square and cube numbers | 10 | 13 |  |  |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 6 | 24 |  |  |  |  |  |  |  |  |
| Short $x$ | 15 | 18 |  |  |  |  |  |  |  |  |
| Long $x$ | 22 | 28 |  |  |  |  |  |  |  |  |
| Short $\div$, including r | 3 | 12 | 16 | 27 |  |  |  |  |  |  |
| Fractions | 8 | 11 | 19 |  |  |  |  |  |  |  |
| Missing numbers | 2 | 12 | 26 |  |  |  |  |  |  |  |
| + | 11 | 14 | 17 | 19 | 25 |  |  |  |  |  |
| - | 2 | 8 | 9 | 20 | 21 | 23 | 26 |  |  |  |
| $\times$ | 1 | 4 | 5 | 6 | 10 | 13 | 15 | 18 | 22 | 28 |
| $\div$ | 3 | 7 | 12 | 16 | 24 | 27 |  |  |  |  |

## Summer Test 3

## Teacher guidance

## Skills and knowledge needed for this test:

- Addition and subtraction of numbers with different numbers of digits, including decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 square and cube numbers

New: Finding fractions of amounts

## A teaching suggestion

Step 1 Show the children a circle and tell them you are going to colour $\frac{3}{8}$ of the circle. Demonstrate how to start by dividing the circle into eighths, and then colour three of the eighths.

Repeat with other fractions (e.g. for $\frac{5}{6}$ divide the shape into sixths and then colour five of the sixths).
ep 3 When the children are confident, use a number instead of a shape. Find $\frac{3}{8}$ of 40 . Start by dividing 40 into eighths: $40 \div 8=5$. So each eighth is worth 5 and we want three of them. $5 \times 3=15$,
so $\frac{3}{8}$ of $40=15$.
Emphasise that this means there are two steps to the calculation: first they divide and then they multiply (e.g. $\frac{2}{5}$ of 30 is $30 \div 5=6$, then $6 \times 2=12$ ).

Step 5 Work through lots of examples together until the children understand the process.

Introduce the chant:'Divide by the bottom and times by the top!'. This is a good process aid to use once the children understand fully what is happening in the calculation.

Complete lots of examples with the children. Allow them to work with a partner before trying the work independently.

- Multiplication of up to four digits by a single-digit or a two-digit number
- Division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10,100 or 1000
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $7 \div 1=\square$ | 7 | 1 | Y4 Autumn Test 6 |
| 2 | $48 \div 12=\square$ | 4 | 1 | Y4 Summer Test 2 |
| 3 | $\square=4 \times 11$ | 44 | 1 | Y4 Autumn Test 5 |
| 4 | $30 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 5 | $9000 \div 10=\square$ | 900 | 1 | Y5 Autumn Test 5 |
| 6 | $50=17+\square$ | 33 | 1 | Y3 Autumn Test 1 , Y3 Autumn Test 3 |
| 7 | $\frac{1}{6}$ of $12=\square$ | 2 | 1 | Y5 Summer Test 3 |
| 8 | $\square=514-168$ | 346 | 1 | Y4 Spring Test 3 |
| 9 | $\frac{1}{5}+\frac{3}{10}=\square$ | $\frac{5}{10}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 10 | $10^{3}=\square$ | 1000 | 1 | Y5 Spring Test 1 |
| 11 | $30=\square \times 6$ | 5 | 1 | Y4 Autumn Test 3, Y4 Spring Test 4 |
| 12 | $9^{2}=\square$ | 81 | 1 | Y5 Autumn Test 4 |
| 13 | $\frac{3}{5}$ of $25=\square$ | 15 | 1 | Y5 Summer Test 3 |
| 14 | $\square=700-263$ | 437 | 1 | Y5 Autumn Test 3 |
| 15 | $5358+48=\square$ | 5406 | 1 | Y5 Spring Test 4 |
| 16 | $\square \times 70=490$ | 7 | 1 | Y4 Autumn Test 3, Y4 Summer Test 5 |
| 17 | $17.25-8.36=\square$ | 8.89 | 1 | Y5 Summer Test 1 |
| 18 | $4156 \times 5=\square$ | 20780 | 1 | Y5 Spring Test 3 |
| 19 | $\frac{4}{7}$ of $56=\square$ | 32 | 1 | Y5 Summer Test 3 |
| 20 | $\square=3.642 \times 10$ | 36.42 | 1 | Y5 Spring Test 2 |
| 21 | $\frac{2}{3}-\frac{4}{15}=\square$ | $\frac{6}{15} \text { (or equiv) }$ | 1 | Y5 Spring Test 6 |
| 22 | $7328 \div 8=\square$ | 916 | 1 | Y5 Spring Test 5 |
| 23 | $67+7.3=\square$ | 74.3 | 1 | Y5 Summer Test 1 |
| 24 | $\frac{5}{9}$ of $198=\square$ | 110 | 1 | Y5 Summer Test 3 |
| 25 | $326 \times 16=\square$ | 5216 | 2* | Y5 Summer Test 2 |
| 26 | $50 \times 273 \times 2=\square$ | 27300 | 1 | Y4 Summer Test 3 |
| 27 | $386=\square-473$ | 859 | 1 | Y4 Spring Test 1 , Y3 Autumn Test 1 |
| 28 | $647 \times 82=\square$ | 53054 | $2 *$ | Y5 Summer Test 2 |
| Total marks |  |  | 30 |  |

* award 1 mark if there is one error in the working


## Summer Test 3

Name:
. Class: $\qquad$ Date: $\qquad$


| 15 | $5358+48=\square$ |  |
| :--- | :--- | :--- |
|  | $\square$ |  |

## Summer Test 3 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| $\pm$ with correct place value | 15 | 17 | 23 |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| - with zeros | 14 |  |  |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 5 | 16 | 26 |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 10 | 12 |  |  |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10,100 or 1000 | 5 | 20 |  |  |  |  |  |  |  |  |  |  |
| Short $x$ | 18 |  |  |  |  |  |  |  |  |  |  |  |
| Long $x$ | 25 | 28 |  |  |  |  |  |  |  |  |  |  |
| Short $\div$, including $r$ | 22 |  |  |  |  |  |  |  |  |  |  |  |
| Fractions | 7 | 9 | 13 | 19 | 21 | 24 |  |  |  |  |  |  |
| Missing numbers | 6 | 11 | 16 | 27 |  |  |  |  |  |  |  |  |
| + | 9 | 15 | 23 | 27 |  |  |  |  |  |  |  |  |
| - | 6 | 8 | 14 | 17 | 21 |  |  |  |  |  |  |  |
| $x$ | 3 | 4 | 10 | 12 | 13 | 18 | 19 | 20 | 24 | 25 | 26 | 28 |
| $\div$ | 1 | 2 | 5 | 7 | 11 | 13 | 16 | 19 | 22 | 24 |  |  |

## YEAR 5 ARITHMETIC PRACTICE TESTS

## Summer Test 4

## Teacher guidance

Skills and knowledge needed for this test:

- Addition and subtraction of numbers with different numbers of digits, including decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 square and cube numbers
- Multiplication of up to four digits by a single-digit or a two-digit number
- Division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10,100 or 1000
- Finding fractions of amounts
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $9 \times 1=\square$ | 9 | 1 | Y4 Autumn Test 6 |
| 2 | $\square \div 5=3$ | 15 | 1 | Y4 Autumn Test 3 |
| 3 | $\square=6 \times 0$ | 0 | 1 | Y4 Autumn Test 4 |
| 4 | $\square=30 \times 10$ | 300 | 1 | Y5 Autumn Test 5 |
| 5 | $84 \div 12=\square$ | 7 | 1 | Y4 Summer Test 2 |
| 6 | $\square^{2}=81$ | 9 | 1 | Y5 Autumn Test 4 |
| 7 | $\frac{1}{2}-\frac{1}{10}=\square$ | $\frac{4}{10}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 8 | $0.4+\square=1$ | 0.6 | 1 | Y5 Summer Test 4 |
| 9 | $4^{3}=\square$ | 64 | 1 | Y5 Spring Test 1 |
| 10 | $\square=\frac{3}{8}$ of 40 | 15 | 1 | Y5 Summer Test 3 |
| 11 | $1=0.7+\square$ | 0.3 | 1 | Y5 Summer Test 4 |
| 12 | $7149 \times 4=\square$ | 28596 | 1 | Y5 Spring Test 3 |
| 13 | $63+\square=421$ | 358 | 1 | Y5 Spring Test 4, Y3 Autumn Test 1 |
| 14 | $815 \div 7=\square$ | 116 r3 | 1 | Y5 Autumn Test 6 |
| 15 | $1-\square=0.2$ | 0.8 | 1 | Y5 Summer Test 4 |
| 16 | $902-459=\square$ | 443 | 1 | Y5 Autumn Test 3 |
| 17 | $26+3829=\square$ | 3855 | 1 | Y5 Spring Test 4 |
| 18 | $\square=64.3+8.2$ | 72.5 | 1 | Y5 Summer Test 1 |
| 19 | $1.72 \div 100=\square$ | 0.0172 | 1 | Y5 Spring Test 2 |
| 20 | $6315 \div 5=\square$ | 1263 | 1 | Y5 Spring Test 5 |
| 21 | $\square=\frac{7}{10}$ of 400 | 280 | 1 | Y5 Summer Test 3 |
| 22 | $35 \times 23=\square$ | 805 | $2 *$ | Y5 Summer Test 2 |
| 23 | $\frac{1}{9}+\frac{4}{90}=\square$ | $\frac{14}{90}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 24 | $\square=9134-56$ | 9078 | 1 | Y5 Spring Test 4 |
| 25 | $8 \times 14 \times 5=\square$ | 560 | 1 | Y4 Summer Test 3 |
| 26 | $289+35.1=\square$ | 324.1 | 1 | Y5 Summer Test 1 |
| 27 | $3252=6 \times \square$ | 542 | 1 | Y5 Spring Test 5, Y4 Autumn Test 3 |
| 28 | $197 \times 58=\square$ | 11426 | $2 *$ | Y5 Summer Test 2 |
| Total marks |  |  | 30 |  |

* award 1 mark if there is one error in the working


## Summer Test 4

Name: $\qquad$ Class: $\qquad$ Date:


| 16 | $902-459=\square$ |  |
| :--- | :--- | :--- |
|  | $\square$ |  |

## Summer Test 4 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| Complements of 1 | 8 | 11 | 15 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\pm$ with correct place value | 13 | 17 | 18 | 24 | 26 |  |  |  |  |  |  |
| - with zeros | 16 |  |  |  |  |  |  |  |  |  |  |
| Multiples of tables | 4 |  |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 6 | 9 |  |  |  |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 4 | 19 |  |  |  |  |  |  |  |  |  |
| Short $x$ | 12 | 25 |  |  |  |  |  |  |  |  |  |
| Long $x$ | 22 | 28 |  |  |  |  |  |  |  |  |  |
| Short $\div$, including r $r$ | 14 | 20 | 27 |  |  |  |  |  |  |  |  |
| Fractions | 7 | 10 | 21 | 23 |  |  |  |  |  |  |  |
| Missing numbers | 2 | 6 | 8 | 11 | 13 | 15 | 27 |  |  |  |  |
| + | 17 | 18 | 23 | 26 |  |  |  |  |  |  |  |
| - | 7 | 8 | 11 | 13 | 15 | 16 | 24 |  |  |  |  |
| - | 1 | 2 | 3 | 4 | 9 | 10 | 12 | 21 | 22 | 25 | 28 |
| $\mathbf{x}$ | 5 | 6 | 10 | 14 | 19 | 20 | 21 | 27 |  |  |  |
| $\div$ |  |  |  |  |  |  |  |  |  |  |  |

## Summer Test 5

## Teacher guidance

## Skills and knowledge needed for this test:

- Complements of 1
- Addition and subtraction of numbers with different numbers of digits, including decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication by 0 ; multiplication and division by 1 ; square and cube numbers


## New: Balanced calculations

## A teaching suggestion

Discuss the meaning of the $=$ sign. Establish that whatever is on one side of the sign needs to be equivalent in value to whatever is on the other side. Show them a pair of balance scales and demonstrate by getting five identical objects and putting three on one side and two on the other. The scales are not balanced; they are not equal.

Display $3+6=5+$ $\qquad$ Clearly $3+6$ does not equal 5 , so this sum does not yet balance. Something needs to be done to the 5 . Ask the children to solve the problem, and then display the completed calculation $3+6=5+4$.

Complete several examples together and then start to move the position of the missing number. The position that causes most errors is $10-6=\square+2$. Explain that people who do not understand these calculations put $10-6=4+2$. Ask the children if they can spot the error and explain why it has happened.

Solve together $10-6=\square+2$. Since $10-6=4$ then $\square+2$ must also equal 4 , so the missing number is 2 .

Work through lots of examples with the children, and then allow them to work with a partner before trying the calculations independently.

- Multiplication of three numbers
- Multiplication of up to four digits by a single-digit or a two-digit number
- Division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10,100 or 1000
- Finding fractions of amounts
- Missing number statements with all four operations

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $0 \times 14=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 2 | $\square=21 \div 1$ | 21 | 1 | Y4 Autumn Test 6 |
| 3 | $\frac{1}{8}$ of $32=\square$ | 4 | 1 | Y5 Summer Test 3 |
| 4 | $1=0.3+\square$ | 0.7 | 1 | Y5 Summer Test 4 |
| 5 | $6400 \div 10=\square$ | 640 | 1 | Y5 Autumn Test 5 |
| 6 | $12 \times 9=\square$ | 108 | 1 | Y4 Spring Test 2, Y4 Summer Test 2 |
| 7 | $\square+0.8=1$ | 0.2 | 1 | Y5 Summer Test 4 |
| 8 | $6^{2}=\square$ | 36 | 1 | Y5 Autumn Test 4 |
| 9 | $2+7=5+\square$ | 4 | 1 | Y5 Summer Test 5 |
| 10 | $\frac{1}{3}+\frac{2}{9}=\square$ | $\frac{5}{9}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 11 | $731-536=\square$ | 195 | 1 | Y4 Spring Test 3 |
| 12 | $\square=132 \div 11$ | 12 | 1 | Y4 Autumn Test 5 |
| 13 | $438=6 \times \square$ | 73 | 1 | Y5 Spring Test 3, Y4 Autumn Test 3 |
| 14 | $639-62=\square$ | 577 | 1 | Y5 Spring Test 4 |
| 15 | $4 \times 5=25-\square$ | 5 | 1 | Y5 Summer Test 5 |
| 16 | $2843 \times 8=\square$ | 22744 | 1 | Y5 Spring Test 3 |
| 17 | $\square=29.2-3.44$ | 25.76 | 1 | Y5 Summer Test 1 |
| 18 | $3912 \div 6=\square$ | 652 | 1 | Y5 Spring Test 5 |
| 19 | $\frac{4}{5}$ of $60=\square$ | 48 | 1 | Y5 Summer Test 3 |
| 20 | $423.8 \times 1000=\square$ | 423800 | 1 | Y5 Spring Test 2 |
| 21 | $\frac{3}{4}-\frac{5}{16}=\square$ | $\frac{7}{16}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 22 | $\square-2=6 \times 3$ | 20 | 1 | Y5 Summer Test 5 |
| 23 | $72 \times 33=\square$ | 2376 | $2 *$ | Y5 Summer Test 2 |
| 24 | $\square^{3}=125$ | 5 | 1 | Y5 Spring Test 1 |
| 25 | $73+84.72=\square$ | 157.72 | 1 | Y5 Summer Test 1 |
| 26 | $735-\square=444$ | 291 | 1 | $\begin{aligned} & \text { Y4 Spring Test 3, } \\ & \text { Y3 Autumn Test } 1 \end{aligned}$ |
| 27 | $\square=5000-2432$ | 2568 | 1 | Y5 Autumn Test 3 |
| 28 | $289 \times 46=\square$ | 13294 | 2* | Y5 Summer Test 2 |
| Total marks |  |  | 30 |  |

* award 1 mark if there is one error in the working


## Summer Test 5

Name:
Class: $\qquad$ Date:


| 15 | $4 \times 5=25-\square$ |  |
| :--- | :--- | :--- |

## Summer Test 5 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| Complements of 1 | 4 | 7 |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\pm$ with correct place value | 14 | 17 | 25 |  |  |  |  |  |  |  |
| - with zeros | 27 |  |  |  |  |  |  |  |  |  |
| Square and cube numbers | 8 | 24 |  |  |  |  |  |  |  |  |
| $\div$ or $\times$ by 10,100 or 1000 | 5 | 20 |  |  |  |  |  |  |  |  |
| Short $x$ | 16 |  |  |  |  |  |  |  |  |  |
| Long $x$ | 23 | 28 |  |  |  |  |  |  |  |  |
| Short $\div$, including r | 13 | 18 |  |  |  |  |  |  |  |  |
| Fractions | 3 | 10 | 19 | 21 |  |  |  |  |  |  |
| Missing numbers | 4 | 7 | 9 | 13 | 15 | 22 | 24 | 26 |  |  |
| + | 9 | 10 | 22 | 25 |  |  |  |  |  |  |
| - | 4 | 7 | 9 | 11 | 14 | 15 | 17 | 21 | 26 | 27 |
| $\times$ | 1 | 6 | 8 | 15 | 16 | 19 | 20 | 22 | 23 | 28 |
| $\div$ | 2 | 3 | 5 | 12 | 13 | 18 | 19 | 24 |  |  |

## YEAR 5 ARITHMETIC PRACTICE TESTS

## Summer Test 6

## Teacher guidance

## Skills and knowledge needed for this test:

- Complements of 1
- Addition and subtraction of numbers with different numbers of digits, including decimals
- Addition and subtraction of fractions with multiples of the same denominator
- Multiplication and division to $12 \times 12$ including derivatives of multiples of 100
- Multiplication of three numbers
- Multiplication by 0 ; multiplication and division by 1 ; square and cube numbers
- Multiplication of up to four digits by a single-digit or a two-digit number
- Division of a four-digit number by a single-digit number, including with remainders
- Multiplication and division of whole numbers or decimals by 10, 100 or 1000
- Finding fractions of amounts
- Missing number statements with all four operations
- Balanced calculations

There are no new skills. This is the end of year test.

| Question number | Question | Answer | Marks | Related test |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\square=18 \times 1$ | 18 | 1 | Y4 Autumn Test 6 |
| 2 | $12 \div 6=\square$ | 2 | 1 | Y4 Spring Test 4 |
| 3 | $11 \times 0=\square$ | 0 | 1 | Y4 Autumn Test 4 |
| 4 | $200 \times 100=\square$ | 20000 | 1 | Y5 Autumn Test 5 |
| 5 | $3^{3}=\square$ | 27 | 1 | Y5 Spring Test 1 |
| 6 | $6145 \times 2=\square$ | 12290 | 1 | Y5 Spring Test 3 |
| 7 | $1=\square+0.1$ | 0.9 | 1 | Y5 Summer Test 4 |
| 8 | $\square \times 9=54$ | 6 | 1 | Y4 Autumn Test 3, Y4 Spring Test 2 |
| 9 | $42=16+\square$ | 26 | 1 | Y3 Autumn Test 1, Y3 Autumn Test 3 |
| 10 | $\square^{2}=144$ | 12 | 1 | Y5 Autumn Test 4 |
| 11 | $\frac{3}{4}+\frac{1}{8}=\square$ | $\frac{7}{8}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 12 | $628+\square=851$ | 223 | 1 | Y4 Spring Test 3, Y3 Autumn Test 1 |
| 13 | $925 \div 4=\square$ | 231 r1 | 1 | Y5 Autumn Test 6 |
| 14 | $800-543=\square$ | 257 | 1 | Y5 Autumn Test 3 |
| 15 | $85 \div \square=5$ | 17 | 1 | Y4 Autumn Test 2, Y4 Autumn Test 3 |
| 16 | $\square=40 \times 45 \times 5$ | 9000 | 1 | Y4 Summer Test 3 |
| 17 | $7408-29=\square$ | 7379 | 1 | Y5 Spring Test 4 |
| 18 | $3296=\square \times 8$ | 412 | 1 | Y5 Spring Test 5, Y4 Autumn Test 3 |
| 19 | $27+13=\square \times 4$ | 10 | 1 | Y5 Summer Test 5 |
| 20 | $\frac{5}{12}$ of $84=\square$ | 35 | 1 | Y5 Summer Test 3 |
| 21 | $\square=364+8+2977$ | 3349 | 1 | Y5 Spring Test 4 |
| 22 | $40 \times 70=\square$ | 2800 | 1 | Y4 Spring Test 6, Y4 Summer Test 5 |
| 23 | $\frac{3}{10}-\frac{3}{40}=\square$ | $\frac{9}{40}$ (or equiv) | 1 | Y5 Spring Test 6 |
| 24 | $8078 \div 7=\square$ | 1154 | 1 | Y5 Spring Test 5 |
| 25 | $34 \times 21=\square$ | 714 | $2 *$ | Y5 Summer Test 2 |
| 26 | $\square=4.1 \div 100$ | 0.041 | 1 | Y5 Spring Test 2 |
| 27 | $83-6.92=\square$ | 76.08 | 1 | Y5 Summer Test 1 |
| 28 | $718 \times 29=\square$ | 20822 | $2 *$ | Y5 Summer Test 2 |
| Total marks |  |  | 30 |  |

[^0]
## Summer Test 6

Name:
Class:
Date:

$1 3 4 \longdiv { 9 2 5 }$


## Summer Test 6 (continued)



How well did you do?
Colour the numbers of the questions you got correct.

| Complements of 1 | 7 |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\pm$ with correct place value | 17 | 21 | 27 |  |  |  |  |  |  |  |
| - with zeros | 14 | 17 |  |  |  |  |  |  |  |  |
| Multiples of tables | 4 | 16 | 22 |  |  |  |  |  |  |  |
| Square and cube numbers | 5 | 10 |  |  |  |  |  |  |  |  |
| $\div$ or $x$ by 10, 100 or 1000 | 4 | 26 |  |  |  |  |  |  |  |  |
| Short $x$ | 6 | 16 |  |  |  |  |  |  |  |  |
| Long $x$ | 25 | 28 |  |  |  |  |  |  |  |  |
| Short $\div$ including r | 13 | 15 | 18 | 24 |  |  |  |  |  |  |
| Fractions | 11 | 20 | 23 |  |  |  |  |  |  |  |
| Missing numbers | 7 | 8 | 9 | 10 | 12 | 15 | 18 | 19 |  |  |
| + | 11 | 19 | 21 |  |  |  |  |  |  |  |
| - | 7 | 9 | 12 | 14 | 17 | 23 | 27 |  |  |  |
| $x$ | 1 | 3 | 4 | 5 | 6 | 16 | 20 | 22 | 25 | 28 |
| $\div$ | 2 | 8 | 10 | 13 | 15 | 18 | 19 | 20 | 24 | 26 |


[^0]:    * award 1 mark if there is one error in the working

