Autumn Test 1

10 minutes

Teacher guidance

Skills and knowledge needed for this test:

- Number bonds to 20
- +, – and = signs

Review: Missing number statements

Skills to cover before the test: Review all the skills needed from the end of the Year 1 book. Revise missing number statements. Ensure the children know they are just calculations where the numbers and signs may need switching around. Trial and error is not needed, and wastes valuable time!

A teaching suggestion

Step 1 Play games where you show children number statements with one number missing. Explain that, to find the missing number, the children need to use the two numbers given in the calculation. Show the children $18 - \square = 12$. Ask what you need to use to find the missing number (i.e. 18 and 12). Repeat with other missing number statements. Always ask what the children will use to find the missing number, and ensure that they say the two numbers already in the number statement.

Step 2 Show the children $6 + \square = 13$. Ask what you need to use to find the missing number (i.e. 6 and 13). Tell the children they need to subtract the smaller number from the larger number to find the missing number: $13 - 6 = 7$, so the missing number is 7. Check it in the original number statement: $6 + 7 = 13$.

Step 3 Show the children $\square + 11 = 17$. Ask what you need to use to find the missing number (i.e. 11 and 17). Tell the children they need to subtract the two numbers to find the missing number: $17 - 11 = 6$, so the missing number is 6. Check it in the original number statement: $6 + 11 = 17$.

Step 4 Show the children $\square - 10 = 2$. Ask what you need to use to find the missing number (i.e. 10 and 2). Tell the children they need to add the two numbers to find the missing number. Discuss why this is an addition instead of a subtraction (because in subtraction we need to start with a larger number, and subtraction is not commutative): $10 + 2 = 12$, so the missing number is 12. Check it in the original number statement: $12 - 10 = 2$.

Step 5 Repeat each step with lots of examples, gradually moving to independent work.

Question number	Question	Answer	Marks	Related test
1	$2 + 7 = \square$	9	1	Y1 Autumn Test 5
2	$\square = 8 - 3$	5	1	Y1 Autumn Test 5
3	$12 + 2 = \square$	14	1	Y1 Summer Test 1
4	$11 = 3 + \square$	8	1	Y2 Autumn Test 1, Y1 Spring Test 2
5	$16 - 8 = \square$	8	1	Y1 Summer Test 3
6	$5 + 8 = \square$	13	1	Y1 Summer Test 1
7	$17 - \square = 11$	6	1	Y2 Autumn Test 1, Y1 Summer Test 3
8	$\square = 18 - 18$	0	1	Y1 Summer Test 4
9	$20 - 9 = \square$	11	1	Y1 Summer Test 5
10	$\square - 7 = 5$	12	1	Y2 Autumn Test 1, Y1 Spring Test 3
Total marks		**10**		

Autumn Test 1

1 $2 + 7 = $ ☐

2 ☐ $= 8 - 3$

3 $12 + 2 = $ ☐

4 $11 = 3 + $ ☐

5 $16 - 8 = $ ☐

6 $5 + 8 = $ ☐

Autumn Test 1 (continued)

7 | $17 - \boxed{} = 11$ | $\square$

8 | $\boxed{} = 18 - 18$ | $\square$

9 | $20 - 9 = \boxed{}$ | $\square$

10 | $\boxed{} - 7 = 5$ | $\square$

| Total marks | /10 |

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

Number bonds to 10	1	2							
Number bonds to 20	3	4	5	6	7	8	9	10
+	1	3	6	10					
−	2	4	5	7	8	9			
Missing number statements	4	7	10						

Autumn Test 2

Teacher guidance

10 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, − and = signs
- Missing number statements

New: Multiplication by 10 and the $\times$ sign

A teaching suggestion

Step 1 Start by getting the children to count in tens. Ask the children to count a given number of tens (e.g. 'Count 3 tens.').

Step 2 Ask the children how much a given number of tens makes (e.g. 'What are 3 tens?'). When they have counted, link the answer with the question (e.g. 3 tens are 30).

Step 3 If the children are not already familiar with the $\times$ sign, introduce it within the ten times table, explaining that it is a different way of asking the same question: '3 $\times$ 10' is the same as asking 'What are 3 tens?' (or other wording as given in your school policy).

Step 4 Show the children cards with calculations showing $\times$10. Ask them to discuss the answer with a partner and then call out the answer on a given signal.

Step 5 When the children are confident, they can attempt similar calculations independently.

Question number	Question	Answer	Marks	Related test
1	$2 + 2 = \square$	4	1	Y1 Autumn Test 1
2	$6 - 4 = \square$	2	1	Y1 Autumn Test 4
3	$17 + 3 = \square$	20	1	Y1 Summer Test 5
4	$18 = 10 + \square$	8	1	Y2 Autumn Test 1, Y1 Spring Test 6
5	$17 - 8 = \square$	9	1	Y1 Summer Test 3
6	$8 \times 10 = \square$	80	1	Y2 Autumn Test 2
7	$19 - \square = 11$	8	1	Y2 Autumn Test 1, Y1 Summer Test 4
8	$17 - 13 = \square$	4	1	Y1 Summer Test 3
9	$10 \times 3 = \square$	30	1	Y2 Autumn Test 2
10	$10 \times 10 = \square$	100	1	Y2 Autumn Test 2
	Total marks	**10**		

Autumn Test 2

Name: .... **Class:** .... **Date:** ....

1 $2 + 2 =$

2 $6 - 4 =$

3 $17 + 3 =$

4 $18 = 10 +$

5 $17 - 8 =$

6 $8 \times 10 =$

Autumn Test 2 (continued)

7 $19 - \boxed{} = 11$

8 $17 - 13 = \boxed{}$

9 $10 \times 3 = \boxed{}$

10 $10 \times 10 = \boxed{}$

Total marks	/10

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

Number bonds to 10	1	2			
Number bonds to 20	3	4	5	7	8
+	1	3			
–	2	4	5	7	8
Missing number statements	4	7			
10x table	6	9	10		

Autumn Test 3

Teacher guidance

10 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x and = signs
- Missing number statements
- Multiplication by 10

New: Division by 10 and the ÷ sign

A teaching suggestion

Step 1 Revise counting in tens to a given number (e.g. count in tens to 50).

Step 2 Ask the children how many tens make a given number (e.g. 'How many tens in 60?').

Step 3 Introduce the ÷ sign and explain this is a different way of asking the same question: '30 ÷ 10' is the same as asking '30 has how many tens?' or '30 splits into how many tens?' (or other wording as given in your school policy).

Step 4 Show the children cards with calculations showing ÷10. Ask them to discuss the answer with a partner and then call out the answer on a given signal.

Step 5 When the children are confident, they can attempt similar calculations independently.

Question number	Question	Answer	Marks	Related test
1	$8 - 6 = \square$	2	1	Y1 Autumn Test 5
2	$3 + 6 = \square$	9	1	Y1 Autumn Test 5
3	$\square = 15 + 4$	19	1	Y1 Summer Test 1
4	$4 \times 10 = \square$	40	1	Y2 Autumn Test 2
5	$14 = 11 + \square$	3	1	Y2 Autumn Test 1, Y1 Summer Test 1
6	$\square + 10 = 20$	10	1	Y2 Autumn Test 1, Y1 Summer Test 5
7	$18 - 14 = \square$	4	1	Y1 Summer Test 4
8	$20 \div 10 = \square$	2	1	Y2 Autumn Test 3
9	$20 - \square = 7$	13	1	Y2 Autumn Test 1, Y1 Summer Test 5
10	$90 \div 10 = \square$	9	1	Y2 Autumn Test 3
Total marks		**10**		

Autumn Test 3

1 $8 - 6 =$ ☐

2 $3 + 6 =$ ☐

3 ☐ $= 15 + 4$

4 $4 \times 10 =$ ☐

5 $14 = 11 +$ ☐

6 ☐ $+ 10 = 20$

7 $18 - 14 =$ ☐

8 $20 \div 10 =$ ☐

9 $20 - $ ☐ $= 7$

10 $90 \div 10 =$ ☐

Total marks | **/10**

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

Number bonds to 10	1	2			
Number bonds to 20	3	5	6	7	9
+	2	3			
−	1	5	6	7	9
Missing number statements	5	6	9		
×	4				
÷	8	10			
10x table	4	8	10		

Autumn Test 4

Teacher guidance

10 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Missing number statements
- Multiplication and division by 10

New: Addition and subtraction of multiples of 10

A teaching suggestion

Step 1 Play games where the children count different objects, saying the object name with each count (e.g. one pen, two pens, three pens ...).

Step 2 Extend this to questions such as: 'If I have three pens and get two more, how many pens will I have?'.

Step 3 Use some cards with '10' written on them and count in the same way (e.g. 1 ten, 2 tens, 3 tens ...). Repeat using counting equipment such as ten frames, base 10 apparatus or ten number rods.

Step 4 Extend this to questions such as: 'If I have 3 tens and get 2 more, how many tens will I have?'.

Step 5 Practise reading multiples of 10 by the number of tens (e.g. for 30 say '3 tens').

Step 6 Hold up two multiples of 10 cards and practise saying the calculation and the difference (e.g. 50 and 20 would be: '5 tens add 2 tens equals 7 tens; 5 tens take away 2 tens equals 3 tens').

Question number	Question	Answer	Marks	Related test
1	$\square = 4 + 6$	10	1	Y1 Autumn Test 6
2	$9 - 7 = \square$	2	1	Y1 Autumn Test 5
3	$14 + 5 = \square$	19	1	Y1 Summer Test 4
4	$10 \times 10 = \square$	100	1	Y2 Autumn Test 2
5	$15 = 8 + \square$	7	1	Y2 Autumn Test 1, Y1 Summer Test 1
6	$30 + 30 = \square$	60	1	Y2 Autumn Test 4
7	$4 + \square = 16$	12	1	Y2 Autumn Test 1, Y1 Summer Test 3
8	$100 - 30 = \square$	70	1	Y2 Autumn Test 4
9	$\square = 80 \div 10$	8	1	Y2 Autumn Test 3
10	$50 + \square = 80$	30	1	Y2 Autumn Test 1, Y2 Autumn Test 4
Total marks		**10**		

Autumn Test 4

Name: .... **Class:** .... **Date:** ....

1 $\boxed{} = 4 + 6$

2 $9 - 7 = \boxed{}$

3 $14 + 5 = \boxed{}$

4 $10 \times 10 = \boxed{}$

5 $15 = 8 + \boxed{}$

6 $30 + 30 = \boxed{}$

Autumn Test 4 (continued)

7 $4 + \boxed{} = 16$

8 $100 - 30 = \boxed{}$

9 $\boxed{} = 80 \div 10$

10 $50 + \boxed{} = 80$

Total marks	/10

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 10	1	2			
Number bonds to 20	3	5	7		
+	1	3	6		
−	2	5	7	8	10
T ± T	6	8	10		
Missing number statements	5	7	10		
×	4				
÷	9				

Autumn Test 5

Teacher guidance

10 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Missing number statements
- Multiplication and division by 10

New: Addition and subtraction of a two-digit and a single-digit number without crossing a ten

A teaching suggestion

Step 1 Use cards to partition numbers into tens and ones (e.g. 23 is 20 and 3, or 2 tens and 3 ones or 1 ten and 13 ones). Using separate cards for each ten and each one makes the process of adding and taking away easier in the early stages. Continue partitioning until the children are proficient.

Step 2 Look at an addition calculation such as $35 + 4$. Partition the 35 and then discuss the meaning of the $+$ sign. Agree that it means more is being added, and get a 4 (or 4 ones).

Step 3 Agree that there is now a 30 and a 5 and a 4, which is 30 and 9, giving 39. Complete similar examples, allowing the children to discuss the work with a partner until they are confident.

Step 4 Repeat the process with subtraction. Look at a subtraction calculation such as $47 − 5$. Partition the 47 and then discuss the meaning of the $−$ sign. Agree that it means some is being taken away, and remove a 5 (or 5 ones).

Step 5 Agree that there is now a 40 and 2 ones, giving 42. Complete similar examples, allowing the children to discuss the work with a partner until they are confident.

Question number	Question	Answer	Marks	Related test
1	$9 + 7 = \square$	16	1	Y1 Summer Test 2, Y1 Summer Test 3
2	$\square = 40 − 10$	30	1	Y2 Autumn Test 4
3	$18 − 6 = \square$	12	1	Y1 Summer Test 4
4	$40 + 60 = \square$	100	1	Y2 Autumn Test 4
5	$12 = 15 − \square$	3	1	Y2 Autumn Test 1, Y1 Summer Test 1
6	$\square = 2 \times 10$	20	1	Y2 Autumn Test 2
7	$57 − 7 = \square$	50	1	Y2 Autumn Test 5
8	$41 + 6 = \square$	47	1	Y2 Autumn Test 5
9	$100 ÷ 10 = \square$	10	1	Y2 Autumn Test 3
10	$\square + 4 = 29$	25	1	Y2 Autumn Test 1, Y2 Autumn Test 5
Total marks		**10**		

Autumn Test 5

Name: .... **Class:** .... **Date:** ....

1 $9 + 7 =$

2 $\boxed{} = 40 - 10$

3 $18 - 6 =$

4 $40 + 60 =$

5 $12 = 15 -$

6 $\boxed{} = 2 \times 10$

Autumn Test 5 (continued)

7 $57 - 7 =$ ☐

8 $41 + 6 =$ ☐

9 $100 \div 10 =$ ☐

10 ☐ $+ 4 = 29$ ☐

Total marks **/10**

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

Number bonds to 20	1	3	5		
+	1	4	8		
–	2	3	5	7	10
T ± T	2	4			
TO ± O	7	8	10		
Missing number statements	5	10			
×	6				
÷	9				

Autumn Test 6

Teacher guidance

10 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Missing number statements
- Addition and subtraction of a two-digit and a single-digit number without crossing a ten
- Multiplication and division by 10

New: Addition and subtraction of a two-digit number and a multiple of 10

A teaching suggestion

Step 1 Use cards to partition numbers into tens and ones (e.g. 51 is 50 and 1, or 5 tens and 1 one). Using separate cards for each ten and each one makes the process of adding and taking away easier in the early stages. Continue partitioning until the children are proficient.

Step 2 Look at an addition calculation such as 35 + 40. Partition the 35 and then discuss the meaning of the + sign. Agree that it means more is being added, and get a 40 (or 4 tens).

Step 3 Agree that there is now a 30 and a 5 and a 40, which is 70 and 5, giving 75. Complete similar examples, allowing the children to discuss the work with a partner until they are confident.

Step 4 Move from working with cards to working by counting forwards and backwards in tens from a given number (e.g. count on 2 tens from 67).

Step 5 Repeat the process with subtraction, ensuring that the children remove the tens cards, and that they count backwards in tens.

Step 6 Once the children are able to complete these calculations mentally, it is a good idea to introduce addition and subtraction written in columns, ensuring that the children know to add or subtract the ones column first. This is good preparation for later work and allows the children to check their mental arithmetic, giving a strong sense of achievement.

Step 7 Extend the activity by showing how, using the bonds to 10 and multiples of 10, they can build multiples of 100 (e.g. $6 + 4 = 10$, $60 + 40 = 100$).

Question number	Question	Answer	Marks	Related test
1	$\square = 10 \times 2$	20	1	Y2 Autumn Test 2
2	$7 + 7 = \square$	14	1	Y1 Summer Test 1
3	$10 - 3 = \square$	7	1	Y1 Autumn Test 6
4	$40 + 50 = \square$	90	1	Y2 Autumn Test 4
5	$12 = 19 - \square$	7	1	Y2 Autumn Test 1, Y1 Summer Test 4
6	$88 - 5 = \square$	83	1	Y2 Autumn Test 5
7	$\square = 26 + 60$	86	1	Y2 Autumn Test 6
8	$40 \div 10 = \square$	4	1	Y2 Autumn Test 3
9	$66 - \square = 30$	36	1	Y2 Autumn Test 1, Y2 Autumn Test 6
10	$50 \div 10 = \square$	5	1	Y2 Autumn Test 3
Total marks		**10**		

Autumn Test 6

Name: .... **Class:** .... **Date:** ....

1 ⬜ $= 10 \times 2$

2 $7 + 7 =$ ⬜

3 $10 - 3 =$ ⬜

4 $40 + 50 =$ ⬜

5 $12 = 19 -$ ⬜

6 $88 - 5 =$ ⬜

Autumn Test 6 (continued)

7 $\boxed{} = 26 + 60$

8 $40 \div 10 = \boxed{}$

9 $66 - \boxed{} = 30$

10 $50 \div 10 = \boxed{}$

Total marks	/10

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	2	3	5	
+	2	4	7	
−		3	5	6	9
T ± T	4			
TO ± O	6			
TO ± T	7	9		
Missing number statements	5	9		
x	1			
÷	8	10		

Spring Test 1

Teacher guidance

(12 minutes)

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10
- Missing number statements
- Multiplication and division by 10

New: Multiplication and division by 2

A teaching suggestion

Step 1 Start by getting the children to count in twos.

Step 2 Show them pictures of objects that feature twos (e.g. monsters with two noses). Ask them questions such as: 'How many noses there would be on six monsters?'.

Step 3 Give a number of twos for the children to count (e.g. count 3 twos) and, when they have counted, link the answer with the request (e.g. 3 twos are 6).

Step 4 When they are confident, ask the children to count the twos in their head and to call out the response on a given signal.

Step 5 Ask the children how many twos make a given number (e.g. 'How many twos in 12?').

Step 6 Show the children cards with calculations showing ÷ 2 and ×2. Ask them to discuss the answer with a partner, and then give the answer on a given signal.

Step 7 When the children are confident, they can work on similar calculations independently.

Question number	Question	Answer	Marks	Related test
1	$10 - 8 = \square$	2	1	Y1 Autumn Test 6
2	$3 + 5 = \square$	8	1	Y1 Autumn Test 5
3	$70 - 20 = \square$	50	1	Y2 Autumn Test 4
4	$\square = 50 + 50$	100	1	Y2 Autumn Test 4
5	$16 = 12 + \square$	4	1	Y2 Autumn Test 1, Y1 Summer Test 3
6	$93 - 2 = \square$	91	1	Y2 Autumn Test 5
7	$\square = 51 + 40$	91	1	Y2 Autumn Test 6
8	$10 \div 10 = \square$	1	1	Y2 Autumn Test 3
9	$4 \times 2 = \square$	8	1	Y2 Spring Test 1
10	$6 \times 2 = \square$	12	1	Y2 Spring Test 1
11	$29 - \square = 10$	19	1	Y2 Autumn Test 1, Y2 Autumn Test 6
12	$16 \div 2 = \square$	8	1	Y2 Spring Test 1
	Total marks	**12**		

Spring Test 1

1 $10 - 8 =$

2 $3 + 5 =$

3 $70 - 20 =$

4 $\boxed{} = 50 + 50$

5 $16 = 12 +$

6 $93 - 2 =$

7 $\boxed{} = 51 + 40$

Spring Test 1 (continued)

8 $10 \div 10 =$ ☐   ☐

9 $4 \times 2 =$ ☐   ☐

10 $6 \times 2 =$ ☐   ☐

11 $29 -$ ☐ $= 10$ ☐

12 $16 \div 2 =$ ☐   ☐

Total marks | **/12**

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

Number bonds to 20	1	2	5		
+	2	4	7		
−	1	3	5	6	11
T ± T	3	4			
TO ± O	6				
TO ± T	7	11			
Missing number statements	5	11			
x	9	10			
÷	8	12			
10x table	8				
2x table	9	10	12		

Spring Test 2

Teacher guidance

12 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10
- Missing number statements
- Multiplication and division by 10 and 2

New: Finding half of an amount

A teaching suggestion

Step 1 Ask two children to split a collection of eight pens equally between them. Use the term 'half' (e.g. 'Can you share the pens so that you each have half the pens?'). Discuss the process needed, i.e. sharing into two piles, which is the same as finding a half.

Step 2 Establish that each child now has 4 pens: 2 children with 4 pens each is 8 pens, giving $2 \times 4 = 8$. Since each child has 4 pens, half of 8 is 4.

Step 3 Repeat with different even numbers of objects.

Step 4 When the children are confident, check they understand that dividing by 2 to find a half relates to the two times table.

Question Number	Question	Answer	Marks	Related test
1	$2 + 5 = \square$	7	1	Y1 Autumn Test 4
2	$13 - 9 = \square$	4	1	Y1 Summer Test 2
3	$60 + 20 = \square$	80	1	Y2 Autumn Test 4
4	$\square = 6 \times 10$	60	1	Y2 Autumn Test 2
5	$90 - \square = 50$	40	1	Y2 Autumn Test 1, Y2 Autumn Test 4
6	$42 + 20 = \square$	62	1	Y2 Autumn Test 6
7	$71 - 20 = \square$	51	1	Y2 Autumn Test 6
8	$7 \times 2 = \square$	14	1	Y2 Spring Test 1
9	$20 \div 2 = \square$	10	1	Y2 Spring Test 1
10	$\square = \frac{1}{2}$ of 4	2	1	Y2 Spring Test 2
11	$\square - 32 = 4$	36	1	Y2 Autumn Test 1, Y2 Autumn Test 5
12	$\frac{1}{2}$ of $14 = \square$	7	1	Y2 Spring Test 2
Total marks		**12**		

Spring Test 2

1 $2 + 5 = \boxed{}$

2 $13 - 9 = \boxed{}$

3 $60 + 20 = \boxed{}$

4 $\boxed{} = 6 \times 10$

5 $90 - \boxed{} = 50$

6 $42 + 20 = \boxed{}$

7 $71 - 20 = \boxed{}$

Spring Test 2 (continued)

8 $7 \times 2 = $ ☐

9 $20 \div 2 = $ ☐

10   ☐ $= \frac{1}{2}$ of 4 ☐

11   ☐ $- 32 = 4$ ☐

12 $\frac{1}{2}$ of 14 $= $ ☐

Total marks	/12

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

Number bonds to 20	1	2		
+	1	3	6	
−	2	5	7	11
T ± T	3	5		
TO ± O	11			
TO ± T	6	7		
Missing number statements	5	11		
x	4	8		
÷	9	10	12	
10x table	4			
2x table	8	9	10	12
$\frac{1}{2}$ of an amount	10	12		

Spring Test 3

12 minutes

Teacher guidance

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10
- Missing number statements
- Multiplication and division by 10 and 2
- Finding half of an amount

New: Addition and subtraction of a two-digit and a single-digit number crossing a ten

A teaching suggestion

Step 1 Show the children a two-digit number such as 36 and ask them to work out how many more would be needed to get to the next ten: we need 4 more to get to the next ten, 40. Ensure that they link this to their knowledge of number bonds to 10. It may help to use tens and ones cards so the children can visualise the process if they are unsure.

Step 2 Repeat the exercise with different two-digit numbers until the children are proficient.

Step 3 Now show the children a two-digit number such as 45 and ask them to work out how many are needed to get to the next ten, 50. Then show them a single-digit number which is greater than the number needed (e.g. 45 + 7).

Step 4 Partition the numbers so that the children can see 40 + 5 + 7. Ask them to use their knowledge of number bonds to obtain the value of 7 + 5, resulting in 40 + 12. Discuss how to find the answer (e.g. count on 4 tens from 12, or partition the 12 into a 10 and a 2).

Step 5 Another method to add 45 + 7 could be to split the single-digit number so that part is used to take the two-digit number to the next ten and then the rest of the number is added (e.g. 45 + 7 = 45 + 5 + 2 = 50 + 2 = 52). It helps to use tens and ones cards so the children can visualise this process.

Step 6 Repeat the process for subtraction, working down to the ten before.

Question number	Question	Answer	Marks	Related test
1	$3 + 4 = \square$	7	1	Y1 Autumn Test 4
2	$7 + 9 = \square$	16	1	Y1 Summer Test 2
3	$\square = 8 \times 2$	16	1	Y2 Spring Test 1
4	$30 + \square = 80$	50	1	Y2 Autumn Test 1, Y2 Autumn Test 4
5	$35 + 4 = \square$	39	1	Y2 Autumn Test 5
6	$7 \times 10 = \square$	70	1	Y2 Autumn Test 2
7	$\square - 25 = 20$	45	1	Y2 Autumn Test 1, Y2 Autumn Test 6
8	$18 \div 2 = \square$	9	1	Y2 Spring Test 1
9	$\frac{1}{2}$ of $10 = \square$	5	1	Y2 Spring Test 2
10	$73 + 8 = \square$	81	1	Y2 Spring Test 3
11	$\square = 90 \div 10$	9	1	Y2 Autumn Test 3
12	$43 - \square = 8$	35	1	Y2 Autumn Test 1, Y2 Spring Test 3
Total marks		**12**		

Spring Test 3

1 $3 + 4 = \boxed{}$

2 $7 + 9 = \boxed{}$

3 $\boxed{} = 8 \times 2$

4 $30 + \boxed{} = 80$

5 $35 + 4 = \boxed{}$

6 $7 \times 10 = \boxed{}$

7 $\boxed{} - 25 = 20$

Spring Test 3 (continued)

8 $18 \div 2 =$ ☐

9 $\frac{1}{2}$ of $10 =$ ☐

10 $73 + 8 =$ ☐

11 $\boxed{} = 90 \div 10$ ☐

12 $43 - \boxed{} = 8$ ☐

Total marks	/12

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

Number bonds to 20	1	2		
+	1	2	5	10
−	4	7	12	
T ± T	4			
TO ± O	5	10	12	
TO ± T	7			
Missing number statements	4	7	12	
×	3	6		
÷	8	9	11	
10x table	6	11		
2x table	3	8	9	
$\frac{1}{2}$ of an amount	9			

Spring Test 4

Teacher guidance

⏱ **12** minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten

- Addition and subtraction of a two-digit number and a multiple of 10
- Missing number statements
- Multiplication and division by 10 and 2
- Finding half of an amount

New: Addition and subtraction of two two-digit numbers without crossing a ten

A teaching suggestion

Step 1 For mental methods, adapt the method for adding or subtracting a two-digit number to a single-digit number or a multiple of 10.

Step 2 Introduce the children to the columnar setting out for addition or subtraction, for example:

$$\begin{array}{r} 3\,4 \\ +\,2\,5 \\ \hline \end{array}$$

Step 3 Ensure that the children add or subtract the ones first. When the children add or subtract the tens, encourage them to refer to them by their true value (e.g. saying 20 rather than 2). Starting to use columns now is good preparation for later arithmetic work.

Step 4 Extend this work by looking at pairs of two-digit numbers that make 100. The children can investigate to find any rules or patterns that help them find these pairs of numbers (e.g. the ones add to 10 and the tens add to 90).

Question number	Question	Answer	Marks	Related test
1	$6 + 3 = \square$	9	1	Y1 Autumn Test 5
2	$4 + 10 = \square$	14	1	Y1 Spring Test 5
3	$10 \div 2 = \square$	5	1	Y2 Spring Test 1
4	$70 - 40 = \square$	30	1	Y2 Autumn Test 4
5	$98 - \square = 2$	96	1	Y2 Autumn Test 1, Y2 Autumn Test 5
6	$10 \times 9 = \square$	90	1	Y2 Autumn Test 2
7	$34 - 7 = \square$	27	1	Y2 Spring Test 3
8	$\square = 80 \div 10$	8	1	Y2 Autumn Test 3
9	$\square = \frac{1}{2}$ of 20	10	1	Y2 Spring Test 2
10	$53 + 23 = \square$	76	1	Y2 Spring Test 4
11	$32 - \square = 5$	27	1	Y2 Autumn Test 1, Y2 Spring Test 3
12	$64 - 42 = \square$	22	1	Y2 Spring Test 4
Total marks		**12**		

Spring Test 4

1 $6 + 3 = \boxed{}$ ☐

2 $4 + 10 = \boxed{}$ ☐

3 $10 \div 2 = \boxed{}$ ☐

4 $70 - 40 = \boxed{}$ ☐

5 $98 - \boxed{} = 2$ ☐

6 $10 \times 9 = \boxed{}$ ☐

7 $34 - 7 = \boxed{}$ ☐

Spring Test 4 (continued)

8 $\boxed{} = 80 \div 10$ $\square$

9 $\boxed{} = \frac{1}{2}$ of 20 $\square$

10
$$
\begin{array}{r}
5\ 3 \\
+\ 2\ 3 \\
\hline
\end{array}
$$
$\square$

11 $32 - \boxed{} = 5$ $\square$

12
$$
\begin{array}{r}
6\ 4 \\
-\ 4\ 2 \\
\hline
\end{array}
$$
$\square$

Total marks **/12**

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

Number bonds to 20	1	2			
+	1	2	10		
−	4	5	7	11	12
T ± T	4				
TO ± O	5	7	11		
TO ± TO	10	12			
Missing number statements	5	11			
x	6				
÷	3	8	9		
10x table	6	8			
2x table	3	9			
$\frac{1}{2}$ of an amount	9				

Spring Test 5

Teacher guidance

12 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10
- Addition and subtraction of two two-digit numbers without crossing a ten
- Missing number statements
- Multiplication and division by 10 and 2
- Finding half of an amount

New: Multiplication and division by 5

A teaching suggestion

Step 1 Start by getting the children to count in fives.

Step 2 Show the children an object or picture featuring the number 5 (e.g. an alien with five eyes). Ask the children to say how many eyes there would be with four aliens. Repeat with other numbers of aliens.

Step 3 Give a number of fives for the children to count (e.g. count 3 fives) and, when they have counted, link the answer with the request (e.g. 3 fives are 15).

Step 4 When they are confident, ask the children to count the fives in their head and to call out the response on a given signal.

Step 5 Ask the children how many fives make a given number (e.g. 'How many fives in 10?').

Step 6 Show the children cards with calculations showing ÷5 and x5. Ask them to discuss the answer with a partner and then call out the answer on a given signal.

Step 7 When the children are confident, they can work on similar calculations independently.

Question Number	Question	Answer	Marks	Related test
1	$\square - 5 = 3$	8	1	Y2 Autumn Test 1, Y1 Autumn Test 5
2	$9 + 4 = \square$	13	1	Y1 Summer Test 2
3	$4 \times 2 = \square$	8	1	Y2 Spring Test 1
4	$78 - 5 = \square$	73	1	Y2 Autumn Test 5
5	$\square + 30 = 90$	60	1	Y2 Autumn Test 1, Y2 Autumn Test 4
6	$5 \times 10 = \square$	50	1	Y2 Autumn Test 2, Y2 Spring Test 5
7	$56 - 9 = \square$	47	1	Y2 Spring Test 3
8	$\square = 6 \times 5$	30	1	Y2 Spring Test 5
9	$\frac{1}{2}$ of $16 = \square$	8	1	Y2 Spring Test 2
10	$45 + 51 = \square$	96	1	Y2 Spring Test 4
11	$45 \div 5 = \square$	9	1	Y2 Spring Test 5
12	$36 + \square = 67$	31	1	Y2 Autumn Test 1, Y2 Spring Test 4
Total marks		**12**		

Spring Test 5

Name: .... **Class:** .... **Date:** ....

1 $\boxed{} - 5 = 3$

2 $9 + 4 = \boxed{}$

3 $4 \times 2 = \boxed{}$

4 $78 - 5 = \boxed{}$

5 $\boxed{} + 30 = 90$

6 $5 \times 10 = \boxed{}$

7 $56 - 9 = \boxed{}$

Spring Test 5 (continued)

8 $\boxed{} = 6 \times 5$

9 $\dfrac{1}{2}$ of $16 = \boxed{}$

10 $\begin{array}{r} 4\ 5 \\ +\ \underline{5\ 1} \\ \end{array}$

11 $45 \div 5 = \boxed{}$

12 $36 + \boxed{} = 67$

| Total marks | /12 |

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

Number bonds to 20	1	2		
+	1	2	10	
−	4	5	7	12
TO ± O	4	7		
TO ± T	5			
TO ± TO	10	12		
Missing number statements	1	5	12	
x	3	6	8	
÷	9	11		
10x table	6			
2x table	3	9		
5x table	6	8	11	
$\frac{1}{2}$ of an amount	9			

Spring Test 6

Teacher guidance

12 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10
- Addition and subtraction of two two-digit numbers without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding half of an amount

New: Addition of three single-digit numbers

A teaching suggestion

Step 1 Display the numbers 4, 8 and 6 in this order. Explain that the children need to add the numbers and that you want to find an easy way to do it.

Step 2 Challenge the children to work with a partner to find a quick way to add the numbers. Emphasise the importance of using their knowledge of number bonds.

Step 3 Establish that finding easy number bonds is a good method and that using $4 + 6 = 10$ is an easier way to start than trying to add 4 and 8.

Step 4 Work through similar examples.

Step 5 Put three sets of single-digit numbers (from 0 to 9) in a bag. Ask three children to select one card each at random and then to work together to add their three cards. Encourage them to find the easiest way using number bonds to 10, and then other number bonds.

Question number	Question	Answer	Marks	Related test
1	$\square = 6 - 5$	1	1	Y1 Autumn Test 4
2	$6 \times 2 = \square$	12	1	Y2 Spring Test 1
3	$8 + 8 = \square$	16	1	Y1 Summer Test 3
4	$\square = 7 + 3 + 8$	18	1	Y2 Spring Test 6
5	$69 - \square = 65$	4	1	Y2 Autumn Test 1, Y2 Autumn Test 5
6	$8 \times 10 = \square$	80	1	Y2 Autumn Test 2
7	$23 + 8 = \square$	31	1	Y2 Spring Test 3
8	$\square - 30 = 40$	70	1	Y2 Autumn Test 1, Y2 Autumn Test 4
9	$\frac{1}{2}$ of $\square = 11$	22	1	Y2 Autumn Test 1, Y2 Spring Test 2
10	$6 + 8 + 7 = \square$	21	1	Y2 Spring Test 6
11	$40 \div 5 = \square$	8	1	Y2 Spring Test 5
12	$56 + 23 = \square$	79	1	Y2 Spring Test 4
	Total marks	**12**		

Spring Test 6

1 $\boxed{} = 6 - 5$

2 $6 \times 2 = \boxed{}$

3 $8 + 8 = \boxed{}$

4 $\boxed{} = 7 + 3 + 8$

5 $69 - \boxed{} = 65$

6 $8 \times 10 = \boxed{}$

7 $23 + 8 = \boxed{}$

Spring Test 6 (continued)

8 $\boxed{} - 30 = 40$

9 $\frac{1}{2}$ of $\boxed{} = 11$

10 $6 + 8 + 7 = \boxed{}$

11 $40 \div 5 = \boxed{}$

12
$$\begin{array}{r} 5\ 6 \\ +\ 2\ 3 \\ \hline \end{array}$$

Total marks /12

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1	3				
+	3	4	7	8	10	12
−	1	5				
O + O + O	4	10				
TO ± O	5	7				
TO ± T	8					
TO ± TO	8	12				
Missing number statements	5	8	9			
x	2	6	9			
÷	11					
10x table	6					
2x table	2	9				
5x table	11					
$\frac{1}{2}$ of an amount	9					

Summer Test 1

Teacher guidance

🕐 **15** minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten

- Addition and subtraction of a two-digit number and a multiple of 10
- Addition and subtraction of two two-digit numbers without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding half of an amount

New: Finding a quarter of an amount

A teaching suggestion

Step 1 Review the meaning of halve (i.e. split into two). Discuss the meaning of quarter (i.e. split into four).

Step 2 Show some objects and quarter them (e.g. a piece of paper, a pizza or a cake).

Step 3 Ask four children to split a collection of eight pens equally between them. Use the term 'quarter' (e.g. 'Can you share the pens so that you each have a quarter of the pens?').

Step 4 Agree that each child has 2 pens, so a quarter of 8 is 2.

Step 5 Repeat with different numbers of objects that can be divided equally by 4.

Step 6 When the children are confident, introduce the written form: $\frac{1}{4}$ of 12 = ☐. Ensure they are confident that '$\frac{1}{4}$' means the same as 'a quarter' and 'one quarter'.

Question Number	Question	Answer	Marks	Related test
1	$10 - 6 =$ ☐	4	1	Y1 Autumn Test 6
2	$30 \div 10 =$ ☐	3	1	Y2 Autumn Test 2
3	$19 - 13 =$ ☐	6	1	Y1 Summer Test 4
4	☐ $= 7 + 8$	15	1	Y1 Summer Test 1
5	$2 + 9 + 8 =$ ☐	19	1	Y2 Spring Test 6
6	$3 \times 5 =$ ☐	15	1	Y2 Spring Test 5
7	$45 -$ ☐ $= 42$	3	1	Y2 Autumn Test 1, Y2 Spring Test 4
8	☐ $= 60 + 20$	80	1	Y2 Autumn Test 4
9	$10 \div 2 =$ ☐	5	1	Y2 Spring Test 1
10	$47 -$ ☐ $= 7$	40	1	Y2 Autumn Test 1, Y2 Autumn Test 5
11	☐ $= \frac{1}{2}$ of 18	9	1	Y2 Spring Test 2
12	$67 - 34 =$ ☐	33	1	Y2 Spring Test 4
13	$\frac{1}{4}$ of 4 = ☐	1	1	Y2 Summer Test 1
14	☐ $+ 32 = 84$	52	1	Y2 Autumn Test 1, Y2 Spring Test 4
15	$\frac{1}{4}$ of 12 = ☐	3	1	Y2 Summer Test 1
Total marks		**15**		

Summer Test 1

1 $10 - 6 = $ [ ]

2 $30 \div 10 = $ [ ]

3 $19 - 13 = $ [ ]

4 $\boxed{} = 7 + 8$ [ ]

5 $2 + 9 + 8 = $ [ ]

6 $3 \times 5 = $ [ ]

7 $45 - \boxed{} = 42$ [ ]

8 $\boxed{} = 60 + 20$ [ ]

9 $10 \div 2 = $ [ ]

Summer Test 1 (continued)

10 $47 - \boxed{} = 7$ ☐

11 $\boxed{} = \frac{1}{2}$ of 18 ☐

12
$$\begin{array}{r} 6\ 7 \\ -\ 3\ 4 \\ \hline \end{array}$$
☐

13 $\frac{1}{4}$ of $4 = \boxed{}$ ☐

14 $\boxed{} + 32 = 84$ ☐

15 $\frac{1}{4}$ of $12 = \boxed{}$ ☐

| **Total marks** | **/15** |

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1	3	4			
+	4	5	8			
−	1	3	7	10	12	14
O + O + O	5					
TO ± O	10					
TO ± T	8					
TO ± TO	3	7	8	12	14	
Missing number statements	7	10	14			
x	6					
÷	2	9	11	13	15	
10x table	2					
2x table	9	11				
5x table	6					
$\frac{1}{2}$ of an amount	11					
$\frac{1}{4}$ of an amount	13	15				

Summer Test 2

15 minutes

Teacher guidance

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten

- Addition and subtraction of a two-digit number and a multiple of 10
- Addition and subtraction of two two-digit numbers without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding a half or a quarter of an amount

New: Addition of two two-digit numbers crossing a ten

A teaching suggestion

Step 1 Start by adding $45 + 44$ using the column method, adding the ones first.

Step 2 Next try adding $37 + 45$ using the column method, and discuss the problem that occurs when $7 + 5 = 12$.

Step 3 Agree that 12 is $10 + 2$ and ask the children to discuss how they can write that in their calculation.

Step 4 Show them that the 2 is written in the ones answer column while the 10 is written underneath the tens column as a 1 because it is 1 ten.

$$\begin{array}{r} 3\,7 \\ +\ 4\,5 \\ \hline 2 \\ {}_1 \end{array}$$

Step 5 Show how the written number still says 12 (not 21!) but with the 1 written in a different place.

Step 6 Discuss how many tens there are to add together (i.e. 3, 4 and 1) and that this makes 8 tens or 80. Read through the question and answer it together.

$$\begin{array}{r} 3\,7 \\ +\ 4\,5 \\ \hline 8\,2 \\ {}_1 \end{array}$$

Step 7 Complete lots of examples together and in small groups before trying independent work.

Question number	Question	Answer	Marks	Related test
1	$16 = 5 + \square$	11	1	Y2 Autumn Test 1, Y1 Spring Test 2
2	$4 \times 5 = \square$	20	1	Y2 Spring Test 5
3	$18 - 7 = \square$	11	1	Y1 Summer Test 4
4	$\square = 9 \times 2$	18	1	Y2 Spring Test 1
5	$\square = 7 + 4 + 5$	16	1	Y2 Spring Test 6
6	$70 \div 10 = \square$	7	1	Y2 Autumn Test 3
7	$48 - \square = 18$	30	1	Y2 Autumn Test 1, Y2 Spring Test 4
8	$54 - 8 = \square$	46	1	Y2 Spring Test 3
9	$\frac{1}{2}$ of $8 = \square$	4	1	Y2 Spring Test 2
10	$\square - 57 = 5$	62	1	Y2 Autumn Test 1, Y2 Spring Test 3
11	$15 \div 3 = \square$	5	1	Y2 Spring Test 5
12	$86 - 55 = \square$	31	1	Y2 Spring Test 4
13	$\frac{1}{4}$ of $8 = \square$	2	1	Y2 Summer Test 1
14	$31 + \square = 52$	21	1	Y2 Autumn Test 1, Y2 Spring Test 4
15	$46 + 36 = \square$	82	1	Y2 Summer Test 2
Total marks		**15**		

Summer Test 2

1 $16 = 5 +$ ☐

2 $4 \times 5 =$ ☐

3 $18 - 7 =$ ☐

4 $\boxed{} = 9 \times 2$ ☐

5 $\boxed{} = 7 + 4 + 5$ ☐

6 $70 \div 10 =$ ☐

7 $48 - \boxed{} = 18$ ☐

8 $54 - 8 =$ ☐

9 $\frac{1}{2}$ of $8 =$ ☐

Summer Test 2 (continued)

10 $\boxed{} - 57 = 5$ $\square$

11 $15 \div 3 = \boxed{}$ $\square$

12
$$\begin{array}{r} 8\ 6 \\ -\ 5\ 5 \\ \hline \end{array}$$
$\square$

13 $\frac{1}{4}$ of $8 = \boxed{}$ $\square$

14 $31 + \boxed{} = 52$ $\square$

15
$$\begin{array}{r} 4\ 6 \\ +\ 3\ 6 \\ \hline \end{array}$$
$\square$

Total marks **/15**

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1	3				
+	5	10	15			
−	1	3	7	8	12	14
O + O + O	5					
TO ± O	1	3	8	10		
TO ± TO	7	12	14			
TO + TO with carry	15					
Missing number statements	1	7	10	14		
x	2	4				
÷	6	9	11	13		
10x table	6					
2x table	4	9	13			
5x table	2	11				
$\frac{1}{2}$ of an amount	9					
$\frac{1}{4}$ of an amount	13					

Summer Test 3

Teacher guidance

⏱ 15 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten

- Addition and subtraction of a two-digit number and a multiple of 10
- Addition and subtraction of two two-digit numbers with and without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding a half or a quarter of an amount

New: Finding two quarters and three quarters of an amount

A teaching suggestion

Step 1 Ask four children to share eight pencils equally. Use the term 'quarter' (e.g. 'Can you share the pencils so that you each have one quarter of the pencils?').

Step 2 Agree that each child has 2 pencils, so a quarter of 8 is 2. With each child in turn say: 'This quarter is worth 2'.

Step 3 Put 2 children together and ask: 'What are two quarters of 8 worth?'; agree that the answer is 4.

Step 4 Give another 2 children 8 pencils and ask them to split them equally between them. Use the term 'half'. When they have finished, compare the results. Two quarters of 8 is 4 and a half of 8 is 4. Explain that they give the same answer because two quarters is the same as one half.

Step 5 Go back to the group that is split into quarters. Review with: 'This quarter is worth 2'. Put 2 children together and agree that 'Two quarters are worth 4'. Put 3 children together and ask: 'What are three quarters of 8 worth?'; agree that the answer is 6.

Step 6 Repeat with finding one, two and three quarters of other multiples of 4.

Question number	Question	Answer	Marks	Related test
1	$\square = 13 - 3$	10	1	Y1 Summer Test 1
2	$5 \times \square = 10$	2	1	Y2 Spring Test 5
3	$45 + 20 = \square$	65	1	Y2 Autumn Test 6
4	$\square = 6 \times 10$	60	1	Y2 Autumn Test 2
5	$6 + 3 + 8 = \square$	17	1	Y2 Spring Test 6
6	$\square - 8 = 55$	63	1	Y2 Autumn Test 1, Y2 Spring Test 3
7	$7 \times 5 = \square$	35	1	Y2 Spring Test 5
8	$\frac{1}{2}$ of $12 = \square$	6	1	Y2 Spring Test 2
9	$68 - 42 = \square$	26	1	Y2 Spring Test 4
10	$45 \div \square = 5$	9	1	Y2 Spring Test 5
11	$43 + 35 = \square$	78	1	Y2 Spring Test 4
12	$\frac{2}{4}$ of $8 = \square$	4	1	Y2 Summer Test 3
13	$56 - \square = 23$	33	1	Y2 Autumn Test 1, Y2 Spring Test 4
14	$37 + 28 = \square$	65	1	Y2 Summer Test 2
15	$\frac{3}{4}$ of $20 = \square$	15	1	Y2 Summer Test 3
Total marks		**15**		

Summer Test 3

Name: .... Class: .... Date: ....

1 $\boxed{} = 13 - 3$

2 $5 \times \boxed{} = 10$

3 $45 + 20 = \boxed{}$

4 $\boxed{} = 6 \times 10$

5 $6 + 3 + 8 = \boxed{}$

6 $\boxed{} - 8 = 55$

7 $7 \times 5 = \boxed{}$

8 $\frac{1}{2}$ of $12 = \boxed{}$

9
$$\begin{array}{r} 6\ 8 \\ -\ 4\ 2 \\ \hline \end{array}$$

Summer Test 3 (continued)

10 $45 \div \boxed{} = 5$ ☐

11 $\begin{array}{r} 4\ 3 \\ +\ 3\ 5 \\ \hline \end{array}$ ☐

12 $\dfrac{2}{4}$ of $8 = \boxed{}$ ☐

13 $56 - \boxed{} = 23$ ☐

14 $\begin{array}{r} 3\ 7 \\ +\ 2\ 8 \\ \hline \end{array}$ ☐

15 $\dfrac{3}{4}$ of $20 = \boxed{}$ ☐

Total marks	**/15**

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1				
+	3	5	6	11	14
−	1	9	13		
O + O + O	5				
TO ± O	6				
TO ± TO	3	9	11	13	
TO + TO with carry	14				
Missing number statements	6	13			
x	4	7	12	15	
÷	2	8	10	12	15
10x table	4				
2x table	2	8	12		
5x table	2	7	10		
Fractions of an amount	8	12	15		

Summer Test 4

Teacher guidance

⏱ **15** minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10

- Addition and subtraction of two two-digit numbers without crossing a ten
- Addition of two two-digit numbers crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding a half, a quarter, two quarters or three quarters of an amount

New: Subtraction of two two-digit numbers crossing a ten

A teaching suggestion

Step 1 Explain that the children are going to play the 'Pirate Game'. Display the number 62 and explain that this is all the treasure the children have. Select two children and give one six cards with '10' written on and the other two cards with '1' written on. Choose a different child to be the pirate and give them an eye-patch (optional!).

Step 2 Underneath the 62 write '− 34'. Explain that this is the payment the pirate demands. The pirate asks the 'ones' child for 4 and is told that he or she cannot pay. The pirate menaces the 'ones' child who whispers to the 'tens' child: 'Lend me some

treasure'. The 'tens' child responds: 'Alright, but I'm only giving you one!' and gives one of the tens cards to the 'ones' child who immediately has to swap the tens card for 10 more ones cards, as 'ones' children cannot hold tens!

Step 3 Alter the displayed calculation to show the calculation below and explain that this is because the 'tens' child is now holding 5 tens and the 'ones' child is holding 12 ones. The pirate again demands 4 ones and is paid, and then demands 3 from the 'tens' child and is paid.

$$\begin{array}{r} {}^{5}\!\!\not{6}\,{}^{1}2 \\ -\ 3\ 4 \\ \hline \end{array}$$

Step 4 Play the game with different subtractions.

Question number	Question	Answer	Marks	Related test
1	$0 + 9 = \square$	9	1	Y1 Autumn Test 3
2	$\square = 5 \times 4$	20	1	Y2 Spring Test 5
3	$71 + 7 = \square$	78	1	Y2 Autumn Test 5
4	$10 \times 10 = \square$	100	1	Y2 Autumn Test 2
5	$8 + 4 + 8 = \square$	20	1	Y2 Spring Test 6
6	$63 - \square = 43$	20	1	Y2 Autumn Test 1, Y2 Spring Test 4
7	$\square = 49 + 6$	55	1	Y2 Spring Test 3
8	$\frac{1}{2}$ of $\square = 5$	10	1	Y2 Autumn Test 1, Y2 Spring Test 2
9	$54 + 24 = \square$	78	1	Y2 Spring Test 4
10	$18 \div 2 = \square$	9	1	Y2 Spring Test 1
11	$73 - 43 = \square$	30	1	Y2 Spring Test 4
12	$45 + 28 = \square$	73	1	Y2 Summer Test 2
13	$\frac{2}{4}$ of $12 = \square$	6	1	Y2 Summer Test 3
14	$\frac{3}{4}$ of $16 = \square$	12	1	Y2 Summer Test 3
15	$62 - 25 = \square$	37	1	Y2 Summer Test 4
	Total marks	**15**		

Summer Test 4

Name: .... **Class:** .... **Date:** ....

1 $0 + 9 =$ ☐

2 ☐ $= 5 \times 4$ ☐

3 $71 + 7 =$ ☐

4 $10 \times 10 =$ ☐

5 $8 + 4 + 8 =$ ☐

6 $63 -$ ☐ $= 43$ ☐

7 ☐ $= 49 + 6$ ☐

8 $\frac{1}{2}$ of ☐ $= 5$ ☐

9
$$\begin{array}{r} 5\ 4 \\ +\ 2\ 4 \\ \hline \end{array}$$
☐

Summer Test 4 (continued)

10 $18 \div 2 =$ ☐

11
$$\begin{array}{r} 7\ 3 \\ -\ \underline{4\ 3} \end{array}$$
☐

12
$$\begin{array}{r} 4\ 5 \\ +\ \underline{2\ 8} \end{array}$$
☐

13 $\dfrac{2}{4}$ of $12 =$ ☐

14 $\dfrac{3}{4}$ of $16 =$ ☐

15
$$\begin{array}{r} 6\ 2 \\ -\ \underline{2\ 5} \end{array}$$
☐

Total marks	/15

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1					
+	1	3	5	7	9	12
−	6	11	15			
O + O + O	5					
TO ± O	3	7				
TO ± TO	6	9	11			
TO + TO with carry	12					
TO − TO with decomposition	15					
Missing number statements	6	8				
×	2	4	8	13	14	
÷	10	13	14			
10x table	4					
2x table	8	10	13			
5x table	2					
Fractions of an amount	8	13	14			

Summer Test 5

15 minutes

Teacher guidance

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10

- Addition and subtraction of two two-digit numbers with and without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding a half, a quarter, two quarters or three quarters of an amount

New: Finding one third of an amount

A teaching suggestion

Step 1 Review the meaning and writing of half and quarter. Emphasise that half is cutting into two and is written as $\frac{1}{2}$, and quarter is cutting into four and is written as $\frac{1}{4}$.

Step 2 Show the children an object (or picture of an object) cut into three. Ask the children how this has been cut. Agree that it is in threes and is called a third. Show them it is written as $\frac{1}{3}$.

Step 3 Ask three children to split a collection of 12 pens equally between them. Use the term 'third' (e.g. 'Can you share the pens so that you each have a third of the pens?').

Step 4 Agree that each child has 4 pens, so a third of 12 is 4.

Step 5 Repeat with different numbers of objects that can be divided equally by 3.

Question number	Question	Answer	Marks	Related test
1	$3 + 9 = \square$	12	1	Y1 Spring Test 3
2	$\square - 6 = 8$	14	1	Y2 Autumn Test 1
3	$\square = 12 \div 2$	6	1	Y2 Spring Test 1
4	$52 + \square = 82$	30	1	Y2 Autumn Test 1, Y2 Spring Test 4
5	$10 \times 5 = \square$	50	1	Y2 Spring Test 5
6	$7 + 6 + 5 = \square$	18	1	Y2 Spring Test 6
7	$87 - 36 = \square$	51	1	Y2 Spring Test 4
8	$59 + 8 = \square$	67	1	Y2 Spring Test 3
9	$\square = \frac{1}{2}$ of 16	8	1	Y2 Spring Test 2
10	$37 + 53 = \square$	90	1	Y2 Summer Test 2
11	$9 \times 10 = \square$	90	1	Y2 Autumn Test 2
12	$58 - 39 = \square$	19	1	Y2 Summer Test 4
13	$35 \div 5 = \square$	7	1	Y2 Spring Test 5
14	$\frac{1}{3}$ of 9 $= \square$	3	1	Y2 Summer Test 5
15	$73 - 36 = \square$	37	1	Y2 Summer Test 4
Total marks		**15**		

Summer Test 5

1 $3 + 9 = \boxed{}$

2 $\boxed{} - 6 = 8$

3 $\boxed{} = 12 \div 2$

4 $52 + \boxed{} = 82$

5 $10 \times 5 = \boxed{}$

6 $7 + 6 + 5 = \boxed{}$

7
$$\begin{array}{r} 8\ 7 \\ -\ 3\ 6 \\ \hline \end{array}$$

8 $59 + 8 = \boxed{}$

9 $\boxed{} = \frac{1}{2} \text{ of } 16$

10
$$+\ \frac{3\ 7}{5\ 3}$$

11 $9 \times 10 =$

12
$$-\ \frac{5\ 8}{3\ 9}$$

13 $35 \div 5 =$

14 $\frac{1}{3}$ of $9 =$

15
$$-\ \frac{7\ 3}{3\ 6}$$

Total marks	/15

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1	2			
+	1	2	6	8	10
−	4	7	12	15	
O + O + O	6				
TO ± O	8				
TO ± TO	4	7			
TO + TO with carry	10				
TO − TO with decomposition	12	15			
Missing number statements	2	4			
x	5	11			
÷	3	9	13	14	
10x table	5	11			
2x table	3	9			
5x table	5	13			
Fractions of an amount	9	14			

Summer Test 6

Teacher guidance

 15 minutes

Skills and knowledge needed for this test:

- Number bonds to 20
- +, −, x, ÷ and = signs
- Addition of three single-digit numbers
- Addition and subtraction of multiples of 10
- Addition and subtraction of a two-digit and a single-digit number with and without crossing a ten
- Addition and subtraction of a two-digit number and a multiple of 10

- Addition and subtraction of two two-digit numbers with and without crossing a ten
- Missing number statements
- Multiplication and division by 10, 5 and 2
- Finding a half, a third, a quarter, two quarters or three quarters of an amount

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

Question number	Question	Answer	Marks	Related test
1	$8 - 2 = \square$	6	1	Y1 Autumn Test 5
2	$20 - \square = 9$	11	1	Y2 Autumn Test 1, Y1 Summer Test 5
3	$\square = 16 + 5$	21	1	Y2 Spring Test 3
4	$2 + 6 + 8 = \square$	16	1	Y2 Spring Test 6
5	$68 - 20 = \square$	48	1	Y2 Autumn Test 6
6	$74 - \square = 6$	68	1	Y2 Autumn Test 1, Y2 Spring Test 3
7	$35 + 22 = \square$	57	1	Y2 Spring Test 4
8	$\square - 60 = 40$	100	1	Y2 Autumn Test 1, Y2 Autumn Test 4
9	$67 - 35 = \square$	32	1	Y2 Spring Test 4
10	$6 \times 5 = \square$	30	1	Y2 Spring Test 5
11	$80 \div 10 = \square$	8	1	Y2 Autumn Test 3
12	$\square = \frac{2}{4}$ of 16	8	1	Y2 Summer Test 3
13	$\frac{1}{3}$ of 18 $= \square$	6	1	Y2 Summer Test 5
14	$56 + 28 = \square$	84	1	Y2 Summer Test 2
15	$91 - 33 = \square$	58	1	Y2 Summer Test 4
Total marks		**15**		

Summer Test 6

1 $8 - 2 =$ ☐

2 $20 -$ ☐ $= 9$

3 ☐ $= 16 + 5$

4 $2 + 6 + 8 =$ ☐

5
$$\begin{array}{r} 6\ 8 \\ -\ 2\ 0 \\ \hline \end{array}$$

6 $74 -$ ☐ $= 6$

7
$$\begin{array}{r} 3\ 5 \\ +\ 2\ 2 \\ \hline \end{array}$$

8 ☐ $- 60 = 40$

9
$$\begin{array}{r} 6\ 7 \\ -\ 3\ 5 \\ \hline \end{array}$$

Summer Test 6 (continued)

10 $6 \times 5 =$ ☐   ☐

11 $80 \div 10 =$ ☐   ☐

12   ☐ $= \frac{2}{4}$ of 16   ☐

13 $\frac{1}{3}$ of 18 $=$ ☐   ☐

14
$$
\begin{array}{r}
5\ 6 \\
+\ 2\ 8 \\
\hline
\end{array}
$$
☐

15
$$
\begin{array}{r}
9\ 1 \\
-\ 3\ 3 \\
\hline
\end{array}
$$
☐

Total marks	**/15**

How well did you do?

Colour the numbers of the questions you got correct.

Number bonds to 20	1	2				
+	3	4	7	8	14	
−	1	2	5	6	9	15
O + O + O	4					
TO ± O	3	6				
TO ± TO	5	7	8	9		
TO + TO with carry	14					
TO − TO with decomposition	15					
Missing number statements	2	6	8			
x	10					
÷	11	12	13			
10x table	11					
2x table	12					
5x table	10					
Fractions of an amount	12	13				