Yr 4 Addition and Subtraction Unit 2 (4201)

Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Counting up to subtract Sheet 1
Working towards ARE

Day 1 Counting up to subtract Sheet 2
Working at ARE / Greater Depth

Day 2 Number bonds to 20 and 50 Sheet 1
Working towards ARE

Day 2 Number bonds to 100 Sheet 2
Working at ARE / Greater Depth
(Note for teacher There are 6 different ways: 32 + 68, 38 + 62, 43 + 57, 47 + 53, 24 + 76, 74 + 26)

Day 3 Frog or counting back Sheet 1
Working towards ARE

Day 3 Frog or counting back Sheet 2
Working at ARE / Greater Depth

Counting up to subtract

Sheet 1

Sketch number lines to help Maths Frog find these differences:

30 - 18 =

70 - 55 =

40 - 27 =

85 - 79 =

53 - 45 =

92 - 78 =

63 - 46 =

95 - 59 =

Challenge

Find the difference between each of these pairs: 23 and 32, 34 and 43 and 45 and 54.
What do you notice?
Write another similar pair.

Counting up to subtract

Sheet 2

Sketch number lines to help Maths Frog find these differences:

33 - 18 =

72 - 55 =

53 - 27 =

65 - 36 =

81 - 45 =

74 - 39 =

95 - 76 =

67 - 38 =

Challenge

Sally writes a large 2-digit number and a smaller 2-digit number. She finds the difference. She notices that the difference has the same digits as the smaller number but in reverse. Write three pairs of numbers that could be Sally's starting numbers. What do you notice about the larger number in each case?

Number bonds to 20 and 50

Sheet 1

Use number bonds to help you write the missing numbers.

10 + ☐ = 20

33 + ☐ = 50

14 + ☐ = 20

39 + ☐ = 50

45 + ☐ = 50

☐ + 12 = 20

☐ + 31 = 50

☐ + 36 = 50

20 = 7 + ☐

50 = ☐ + 28

Challenge

Use digits 3, 4, 6, 7 to create pairs of numbers to fit this sentence. ☐ + ☐ = 110.
Write two sentences giving the same total using 1, 9, 8, 2.

Number bonds to 100

Sheet 2

Use number bonds to fill in the missing numbers and make 100.

50 + ☐ = 100

10 + ☐ = 100

25 + ☐ = 100

45 + ☐ = 100

☐ + 93 = 100

☐ + 81 = 100

☐ + 38 = 100

☐ + 64 = 100

100 = 77 + ☐

100 = 2 + ☐

100 = 56 + ☐

100 = 21 + ☐

100 = ☐ + 68

100 = ☐ + 19

100 = ☐ + 5

100 = ☐ + 43

Challenge

How many ways can the digits 2, 3, 4, 6, 7, 8 be arranged to make two 2-digit numbers totalling 100?
Demonstrate that you have found all possible ways.

Frog or counting back

Sheet 1

Choose whether to use Frog or counting back to solve each of these calculations.

50 – 25

60 – 56

100 – 75

78 – 52

72 – 65

84 – 21

43 – 37

102 – 95

Challenge

Design a subtraction for a friend which is definitely best done using Frog.

Frog or counting back

Sheet 2

Choose whether to use Frog or counting back to solve each of these calculations.

102 – 75

78 – 52

132 – 48

163 – 82

132 – 91

146 – 77

155 – 75

123 – 61

118 – 59

115 – 56

Challenge

Design three subtractions for another child. One must be best done using Frog, one must be best done using counting back, and one should be arguable.

Addition and Subtraction

Answers

Day 1 Counting up to subtract Sheet 1

30 - 18 = 12
70 - 55 = 15
40 - 27 = 13
85 - 79 = 6
53 - 45 = 8
92 - 78 = 14
63 - 46 = 17
95 - 59 = 36

Day 1 Counting up to subtract Sheet 2

33 - 18 = 15
72 - 55 = 17
53 - 27 = 26
65 - 36 = 29
81 - 45 = 36
74 - 39 = 35
95 - 76 = 19
67 - 38 = 29

Day 2 Number bonds to 20 and 50 Sheet 1

10 + 10 = 20
33 + 17 = 50
14 + 6 = 20
39 + 11 = 50
45 + 5 = 50
8 +12 = 20
19 + 31 = 50
14 + 36 = 50
20 = 7 + 13
50 = 22 + 28

Day 2 Number bonds to 100 Sheet 2

50 + 50 = 100
10 + 90 = 100
25 + 75 = 100
45 + 55 = 100
7 + 93 = 100
19 + 81 = 100
62 + 38 = 100
36 + 64 = 100
100 = 77 + 23
100 = 2 + 98
100 = 56 + 44
100 = 21 + 79
100 = 32 + 68
100 = 81 + 19
100 = 95 + 5
100 = 57 + 43

Day 3 Frog or counting back Sheet 1

50 - 25 = 25
100 - 75 = 25
72 - 65 = 7
43 - 37 = 6
60 - 56 = 4
78 - 52 = 26
84 - 21 = 63
102 - 95 = 7

Day 3 Frog or counting back Sheet 2

102 - 75 = 27
132 - 48 = 84
132 - 91 = 41
155 - 75 = 80
118 - 59 = 59
78 - 52 = 26
163 - 82 = 81
146 - 77 = 69
123 - 61 = 62
115 - 56 = 59

Challenge

The difference between each pair of numbers is 9.
The tens digits count up to next 10 and the units digits count back 1.
Other examples: 12 and 21, 56 and 65.

Challenge

Sally's starting numbers could be:
55 and 32 (55 - 32 = 23)
33 and 21 (33 - 21 = 12)
99 and 54 (99 - 54 = 45)
The 10s and 1s digits are the same in the larger starting number.

Challenge

34 + 76 = 110
43 + 67 = 110
37 + 73 = 110
33 + 77 = 110
44 + 66 = 110
36 + 74 = 110
18 + 92 = 110
81 + 29 = 110
98 + 12 = 110
89 + 21 = 110
99 + 11 = 110
22 + 88 = 110

Challenge

22 + 78
23 + 77
24 + 76
26 + 74
27 + 73
28 + 72
32 + 68
33 + 67
34 + 66
36 + 64
37 + 63
38 + 62

There are 12 ways.