Worksheet - Place value to 100

Year: Year 2 · 20

Show your working.

Question 1

Question 1 – Tens and ones *(Section A · Practice)*

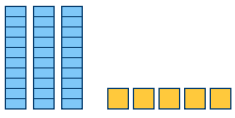
Write the number of tens and ones in each number. Then partition it.

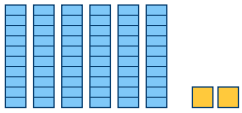
a. 36
b. 58
c. 70
d. 83
e. 19

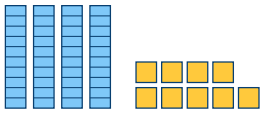
Question 2

Question 2 – Count the blocks *(Section A · Practice)*

Each tall block is 1 ten and each small block is 1 one. Write the number shown.

a. 

b. 

c. 

Question 3

Question 3 – The value of a digit *(Section A · Practice)*

Write the value of the digit that is named in each number.

a. The 4 in 47
b. The 4 in 64
c. The 8 in 82
d. The 8 in 28
e. The 5 in 95

Question 4

Question 4 – 10 more, 10 less *(Section A · Practice)*

Write the number that is 10 more and the number that is 10 less than each number.

a. 34
b. 58
c. 75
d. 46
e. 90

Question 5

Question 5 – Compare and order *(Section A · Practice)*

Write >, < or = in each box. Then order the numbers.

a. 47 __ 74
b. 52 __ 58
c. 60 __ 6 tens
d. 39 __ 41
e. Order from smallest to biggest: 63, 36, 66, 33

Question 6

Question 6 – Counting in steps *(Section A · Practice)*

Fill in the missing numbers.

a. 2, 4, 6, __, 10, 12
b. 5, 10, __, 20, 25, __
c. 3, 6, 9, __, 15, __
d. 30, 40, __, 60, __, 80
e. Count back in 10s from 95: 95, 85, __, __

Question 7

Question 7 – Bags of marbles *(Section B · Real-life practice)*

Leo sorts his marbles into bags of 10. He has 4 full bags and 6 loose marbles in his pocket. His sister Mia has 3 full bags and 15 loose marbles. They want to see who has more marbles.

a. How many marbles does Leo have? Write it as tens and ones.
b. How many marbles does Mia have? Remember to turn 10 loose marbles into a bag.
c. Who has more marbles?
d. Leo finds 4 more loose marbles. How many marbles does he have now?

Question 8

Question 8 – House numbers *(Section B · Real-life practice)*

Sam delivers leaflets to houses on Maple Street. The houses on one side have the numbers 41, 43, 45, 47 and 49 (counting in 2s). The houses on the other side have the numbers 40, 42, 44, 46 and 48. A new house is built on each side at the end of the street.

a. What number is the new house on the odd-numbered side?
b. What number is the new house on the even-numbered side?
c. Which house has a number that is 10 more than 37?
d. The post van stops at the house with a number that has 5 tens and 2 ones. What is the number?

Question 9

Question 9 – The school bookshelf *(Section B · Real-life practice)*

The school library has 100 books. The librarian puts books in piles of 10. She has made 6 piles and has 8 books left on her desk. She counts the books by writing the number in tens and ones.

a. How many books are in the 6 piles and on the desk altogether?
b. How many more books does she need to make 100?
c. The next pile of 10 will make how many piles? How many books will that be altogether?
d. The librarian says, "The number of books is bigger than 60 and smaller than 70." Is she right?

Question 10

Question 10 – Race numbers *(Section B · Real-life practice)*

At the school running race, the children wear numbers on their shirts. Ali has number 59, Beth has number 95, Carl has number 55 and Dina has number 90. The children line up in order from the smallest number to the biggest number at the start of the race.

a. Write the numbers in order, smallest first.
b. Which child stands at the back of the line with the biggest number?
c. Which two numbers have the same digits? What is the difference between their values?
d. The tens digit in Beth's number is worth how much?

Question 11

Question 11 – Counting sweets *(Section B · Real-life practice)*

Hana counts the sweets in a jar by pushing them into rows of 5. She has 9 full rows and 3 sweets on their own. Then she puts the sweets into bags of 10.

a. How many sweets are in the 9 rows?
b. How many sweets does Hana have altogether?
c. How many bags of 10 can she fill? How many sweets are left?
d. Her friend counts in 2s and says there are 24 sweets in her jar. Count in 2s from 2 to 24. How many numbers do you say?

Question 12

Question 12 – Bus tickets *(Section B · Real-life practice)*

Yusuf collects bus tickets. His tickets have numbers on them. He has these tickets: 28, 82, 46, 64. He wants to make a number line on the floor to show them. The number line starts at 20 and ends at 90, going up in tens.

a. Which ticket numbers are between 40 and 70?
b. Between which two tens does 82 sit?
c. Which ticket is closest to 50?
d. Put the four tickets in order from biggest to smallest.

Question 13

Question 13 – Pocket money in coins *(Section B · Real-life practice)*

Isla has 7 ten-pence coins and 8 one-penny coins in her pocket. She counts the money by writing the amount in pence. Her brother has 6 ten-pence coins and 18 one-penny coins.

a. How many pence does Isla have?
b. How many pence does her brother have? Hint: regroup 18 ones.
c. Who has more money?
d. How many more pence does one have than the other?

Question 14

Question 14 – The hundred square puzzle *(Section C · Problem solving)*

Part of a 100 square has been torn. Zara looks at the pieces to work out the missing numbers. Here is a piece. The number 34 is in the top left corner of the piece. The piece is 3 rows tall and 4 columns wide.

34	35	36	37
38	39	40	41
42	43	44	45

a. What are the numbers in the second row of the piece? The numbers go up by 10 as you go down.
b. Zara looks at the number below 47 on the 100 square. What is it?

c. What number is above 52?
d. The piece has 12 numbers. What is the biggest number on the piece?
e. Which numbers on the piece are in the 5 times table?

Question 15

Question 15 – Collecting stamps *(Section C · Problem solving)*

Three friends collect stamps in albums. Each page holds 10 stamps. Ava has 5 full pages and 7 stamps. Ben has 4 full pages and 18 stamps. Cara has 6 full pages and 2 stamps.

Name	Full pages	Extra stamps
Ava	5	7
Ben	4	18
Cara	6	2

a. How many stamps does Ava have?
b. How many stamps does Ben have? Regroup the extra stamps into a page first.
c. How many stamps does Cara have?
d. Put the three children in order, starting with the most stamps.
e. Ava wants to have the same number of stamps as Cara. How many more stamps does Ava need?

Question 16

Question 16 – Skip counting at the zoo *(Section C · Problem solving)*

At the zoo, the children count animals in groups. The keeper puts the penguins in groups of 5, the monkeys in groups of 2 and the lizards in groups of 10. There are 8 groups of penguins, 9 groups of monkeys and 3 groups of lizards.

Animal	Groups	Number in each group
Penguins	8	5
Monkeys	9	2
Lizards	3	10

a. Count in 5s to find the number of penguins.
b. Count in 2s to find the number of monkeys.
c. Count in 10s to find the number of lizards.
d. Which animal has the most? Which has the fewest?
e. How many animals are there altogether?

Question 17

Question 17 – The secret number game *(Section C · Problem solving)*

Max and Isla play a secret number game. One child thinks of a two-digit number and the other asks yes or no questions. Max thinks of a number. His clues are on a card.

a. The number has 6 tens. It is smaller than 65. It is in the 5 times table. What is the number?
b. The number is bigger than 40 and smaller than 50. The ones digit is double the tens digit. What is the number?
c. The number is 10 more than 28. What is it?
d. The number is made from the digits 3 and 7, and it is the bigger of the two possible numbers. What is it?
e. Write the numbers from parts a, b and c in order from smallest to biggest.

Question 18

Question 18 – Planning the school fair prizes *(Section C · Problem solving)*

For the school fair, the teacher buys a big bag of 100 raffle tickets. She tears off tickets in strips of 10. She sells 4 strips on Monday and 3 strips plus 5 loose tickets on Tuesday. On Wednesday she sells 2 more strips.

a. How many tickets does she sell on Monday?
b. How many tickets does she sell on Tuesday?
c. How many tickets has she sold at the end of Wednesday?
d. How many tickets are left, and how many strips of 10 is that?
e. She wants to sell more than 90 tickets. Does she reach this? Explain.

Question 19

Question 19 – Temperatures around the world *(Section C · Problem solving)*

Class 2 look at the temperatures in four cities on one winter day. The temperatures are 12 degrees in London, 21 degrees in Madrid, 7 degrees in Paris and 30 degrees in Cairo. They draw a number line from 0 to 40 to show these temperatures.

a. Which city is the warmest and which is the coldest?
b. Put the cities in order from the coldest to the warmest.
c. What is 10 more than the temperature in London?
d. What is 10 less than the temperature in Cairo?
e. How many more degrees is Cairo than Paris?

Question 20

Question 20 – Challenge: digit puzzles *(Section D · Challenge)*

Otto loves puzzles with digits. Solve each one and show your thinking.

a. Use the digits 2, 5 and 9 once each to make a two-digit number. List all the possible numbers. Which is the biggest? Which is the smallest?
b. I am a two-digit number. My tens digit is 3 more than my ones digit. The digits

add to 9. What number am I?

c. How many two-digit numbers have a ones digit of 5? List the ones between 10 and 50.
d. What is the next number in the pattern 7, 14, 21, 28? What are we counting in?