Year 2 Mathematics
Partitioning Numbers - Worksheet 7

Standard Partitioning (Place Value)

Name: _____   **Date:** _____

Section 1: Partition into Tens and Ones (Fluency)

Break each number into its place value parts.

Question 1: Partition 45 into Tens and Ones:

$$45 = \text{_____} \text{ tens} + \text{_____} \text{ ones}$$

Or:

$$45 = \text{_____} + \text{_____}$$

Question 2: Partition 72 into Tens and Ones:

$$72 = \text{_____} + \text{_____}$$

Question 3: Partition 38 into Tens and Ones:

$$38 = \text{_____} + \text{_____}$$

Question 4: Partition 91 into Tens and Ones:

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$$91 = \underline{\hspace{1.5cm}} + \underline{\hspace{1.5cm}}$$

Question 5: Partition 56 into Tens and Ones:

$$56 = \underline{\hspace{1.5cm}} + \underline{\hspace{1.5cm}}$$

Question 6: Partition 100 into Hundreds, Tens and Ones:

$$100 = \underline{\hspace{1.5cm}} + \underline{\hspace{1.5cm}} + \underline{\hspace{1.5cm}}$$

Partitioning Penguin!

Why did the penguin love partitioning? Because it could break the ice into smaller parts!

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Section 2: Partition Three-Digit Numbers (Reasoning)

Break larger numbers into Hundreds, Tens and Ones.

Question 7: Partition 132 into Hundreds, Tens and Ones:

$$132 = 100 + \rule{2cm}{0.4pt} + \rule{2cm}{0.4pt}$$

Question 8: Partition 245 into Hundreds, Tens and Ones:

$$245 = \rule{2cm}{0.4pt} + \rule{2cm}{0.4pt} + \rule{2cm}{0.4pt}$$

Question 9: Is 70 + 4 the same as 74?
Circle your answer: YES   NO

Question 10: Is 300 + 20 + 8 the same as 328?
Circle your answer: YES   NO

Question 11: Match the number to its parts by writing the letter:
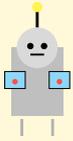 56   A) 60 + 7
  67   B) 80 + 3
  83   C) 50 + 6

56 = \rule{2cm}{0.4pt}   67 = \rule{2cm}{0.4pt}   83 = \rule{2cm}{0.4pt}

Question 12: Partition 409 into Hundreds, Tens and Ones:

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$$409 = \underline{\qquad} + \underline{\qquad} + \underline{\qquad}$$

Splitting Robot!

What did the robot say when it learned partitioning? "I can break it DOWN... beep boop!"

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Section 3: Missing Numbers Challenge

Find the missing number in each partition.

Question 13: Fill in the missing number:

$$200 + _____ + 5 = 265$$

Question 14: Fill in the missing number:

$$_____ + 40 + 9 = 849$$

Question 15: Fill in the missing number:

$$300 + 70 + _____ = 372$$

Question 16: Fill in the missing number:

$$50 + _____ = 58$$

Question 17: Fill in the missing number:

$$_____ + 6 = 96$$

Question 18: Fill in the missing number:

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$$600 + \underline{\hspace{2cm}} + 3 = 653$$

Question 19: Fill in the missing number:

$$\underline{\hspace{2cm}} + 20 + 7 = 427$$

Magic Mathematician!

Why did the magician love maths? Because they could make numbers DISAPPEAR and reappear!

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Answer Key
Worksheet 7: Standard Partitioning

Section 1: Partition into Tens and Ones

1.
$$45 = 4 \text{ tens} + 5 \text{ ones} = 40 + 5$$

2.
$$72 = 70 + 2$$

3.
$$38 = 30 + 8$$

4.
$$91 = 90 + 1$$

5.
$$56 = 50 + 6$$

6.
$$100 = 100 + 0 + 0$$

(or just 100)

Section 2: Partition Three-Digit Numbers

7.
$$132 = 100 + 30 + 2$$

8.
$$245 = 200 + 40 + 5$$

9. YES (70 + 4 = 74)

7

10. YES (300 + 20 + 8 = 328)

11. 56 = **C**, 67 = **A**, 83 = **B**

12.

$$409 = 400 + 0 + 9$$

(or

$$400 + 9$$

)

Section 3: Missing Numbers Challenge

13.

$$200 + \mathbf{60} + 5 = 265$$

14.

$$\mathbf{800} + 40 + 9 = 849$$

15.

$$300 + 70 + \mathbf{2} = 372$$

16.

$$50 + \mathbf{8} = 58$$

17.

$$\mathbf{90} + 6 = 96$$

18.

$$600 + \mathbf{50} + 3 = 653$$

19.

$$\mathbf{400} + 20 + 7 = 427$$

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Year 2 Mathematics
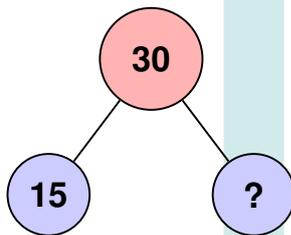## Partitioning Numbers - Worksheet 8

Non-Standard Partitioning & Regrouping

Name: _____   **Date:** _____

Section 1: Different Ways to Partition (Fluency)

Break numbers in different ways using Part-Part-Whole models.

Question 1: Break 30 into two parts. Fill in the missing part:

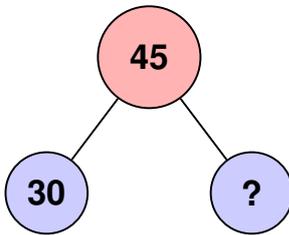**Answer:** $30 = 15 +$ _____

Question 2: Break 50 into two parts:

$$50 = 40 + \text{_____}$$

Question 3: Break 24 into two parts:

$$24 = 10 + \text{_____}$$

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SCAN FOR HELP
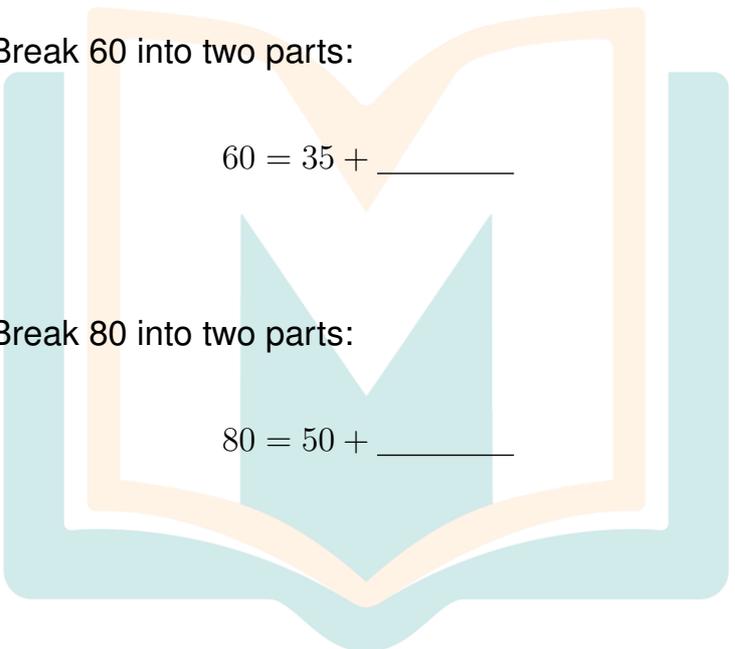
Question 4: Complete the cherry diagram for 45:

45

30   ?

Answer: 45 = 30 + _____

Question 5: Break 60 into two parts:

$$60 = 35 + \rule{2cm}{0.4pt}$$

Question 6: Break 80 into two parts:

$$80 = 50 + \rule{2cm}{0.4pt}$$

Splitting Superstar!

Part Part

Why do numbers love being split? Because they get to make new FRIENDS!

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Section 2: Renaming & Regrouping (Reasoning)

Regroup tens and ones to make different numbers.

Question 7: I have 3 Tens and 15 Ones. What number am I?

Answer: _____

Question 8: Partition 64 in a different way (not 60 + 4):

$$64 = 50 + \text{_____}$$

Question 9: I have 2 Tens and 18 Ones. What number am I?

Answer: _____

Question 10: Partition 53 in two different ways:
Way 1:

$$53 = 50 + \text{_____}$$

Way 2:

$$53 = 40 + \text{_____}$$

Question 11: I have 5 Tens and 12 Ones. What number am I?

Answer: _____

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Question 12: Fill in the blank:

$$35 = 20 + \underline{\hspace{2cm}}$$

Question 13: I have 1 Hundred and 25 Ones. What number am I?

Answer: _____

Regrouping Hero!

What's a superhero's favourite maths skill? RE-GROUP-ING to save the day!

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Section 3: Word Problems & Challenges

Think carefully about these tricky partitioning problems!

Question 14: Sam partitions 125 as 100 + 25. Ben partitions 125 as 120 + 5.
Are they both correct?

Circle your answer: YES   NO

Question 15: Fill in the blank:

$$40 + 12 \text{ is the same as } 30 + \underline{\hspace{2cm}}$$

Question 16: Emma says: "I can partition 75 as 60 + 15."
Is Emma correct?

Circle your answer: YES   NO

Question 17: Complete the pattern of partitioning:

$$36 = 30 + 6$$

$$36 = 20 + 16$$

$$36 = 10 + \underline{\hspace{2cm}}$$

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Question 18: I have 4 Hundreds and 13 Tens. What number am I?

Answer: _____

Question 19: True or False: 200 + 50 + 8 is the only way to partition 258.

Circle your answer: TRUE   FALSE

Question 20: Create your own partition for the number 48:

$$48 = \rule{2cm}{0.4pt} + \rule{2cm}{0.4pt}$$

Partitioning Champion!

Why did the maths book look sad? Because it had too many PROBLEMS to partition!

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Answer Key
Worksheet 8: Non-Standard Partitioning

Section 1: Different Ways to Partition

1. 30 = 15 + **15**

2. 50 = 40 + **10**

3. 24 = 10 + **14**

4. 45 = 30 + **15**

5. 60 = 35 + **25**

6. 80 = 50 + **30**

Section 2: Renaming & Regrouping

7. **45** (3 Tens = 30, plus 15 Ones = 45)

8. 64 = 50 + **14**

9. **38** (2 Tens = 20, plus 18 Ones = 38)

10. Way 1: 53 = 50 + **3**, Way 2: 53 = 40 + **13**

11. **62** (5 Tens = 50, plus 12 Ones = 62)

12. 35 = 20 + **15**

13. **125** (1 Hundred = 100, plus 25 Ones = 125)

Section 3: Word Problems & Challenges

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14. **YES** (Both ways correctly partition 125:

$$100 + 25 = 125$$

and

$$120 + 5 = 125$$

)

15.

$$40 + 12 = 30 + \mathbf{22}$$

(Both equal 52)

16. **YES** (Emma is correct:

$$60 + 15 = 75$$

)

17.

$$36 = 10 + \mathbf{26}$$

18. **530** (4 Hundreds = 400, 13 Tens = 130, so

$$400 + 130 = 530$$

)

19. **FALSE** (There are many ways to partition 258, such as

$$250 + 8$$

,

$$240 + 18$$

, etc.)

20. Accept any valid partition of 48, such as:

16

-

$$48 = 40 + 8$$

(standard)

-

$$48 = 30 + 18$$

-

$$48 = 20 + 28$$

-

$$48 = 25 + 23$$

- Any other correct combination

Excellent Work, Partitioning Experts!

You can split and regroup numbers like a pro!

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