DIVISION OF 2 AND 3-DIGIT NUMBERS

3.20.2019

Subject

Mathematics

Prepared By

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Grade Level

3

Overview

This lesson plan covers teaching content for;

1. Understanding the concept of division
2. Dividing 2 and 3 digit numbers by 1-digit numbers.
3. Multi- Digit division.
4. Dividing numbers by multiples of 10 and 100320 ÷ 80
5. Word problems and quantitative reasoning.

Objectives

Students should be able to;

1. Divide a whole number by 1-digit numbers
2. complete multi-digit division problems
3. divide numbers where there is a remainder
4. Divide whole numbers by 10 and multiples of 10

Guided Practice

Day 2/ Lesson 2: 25 Mins

Dividing numbers using Long division method

1. Long division is an algorithm that repeats the basic steps of
2. 1)Divide; 2) Multiply; 3) Subtract; 4) Drop down the next digit.

Activity Starter/Instruction

1. Let the students know that division is an operation that tells us the number of groups that can be made out of another number.
2. On the board, set up a division problem, such as 17/5. Solve the problem so that you are left with the answer 3 with a remainder of 2.
3. Label each number with its corresponding name. 17 should be the dividend, 5 is the divisor, 3 is the quotient and 2 is the remainder.

   Define these terms for your students as follows:
4. Dividend: In a division problem, the number that is to be divided is called the dividend.
5. Divisor: In a division problem, the number that divides the dividend is called the divisor.
6. Quotient: Upon division, the number obtained other than the remainder is called the quotient.
7. Remainder: The remainder is the number that is left over after dividing.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Direct the students' attention to the board.
2. Write a division problem, such as 83 divided by 7, on the board.
3. Tell the students that the first thing we want to do is create a help box to help us in solving this division problem.
4. Create a chart that lists the products of 7x1, 7x2...7x10.
5. Demonstrate solving this problem for students. You should reach the answer 11 with a remainder of 6.
6. Ask: What does 54 represent in 54 divided by 9?
7. 54 divided by 9 is asking that if you have 54 items and divide the items into groups with 9 items in each group, how many groups would you have? The 54 represents the total number of items you begin with.
8. Ask: What does 9 represent in 54 divided by 9?
9. Once again, 54 divided by 9 is asking that if you have 54 items and divide the items into groups with 9 items in each group, how many

Materials Required

- White Board
- Blank sheets
- Pencils
- Multiplications table

Additional Resources

- https://www.education.com/lesson-plan/solving-long
- https://www.aaaknow.com/xlate/lessonFull.php?slug
- https://www.homeschoolmath.net/teaching/md/how
- https://www.math-only-math.com/division-by-10-and

Additional Notes

3. When division is even in all the digits. Here, students practice just the diving part.
4. We divide numbers where each of the hundreds, tens, and ones (units) digits are evenly divisible by the divisor. The GOAL in this first, easy step is to get students used to two things:
5. To get used to the long division "corner" so that the quotient is written on top.
6. To get used to asking how many times does the divisor go into the various digits of the dividend.

e.g. 3)660

h	t	o
	0	
4)	2	4 8

h	t	o
	0	6 2
4)	2	4 8

7. 4 does not go into 2. You can put zero in the quotient in the hundreds place or omit it. But 4 does go into 24, six times. Put 6 in the quotient.
8. you combine the 2 hundreds with the 4 tens. That makes 24 tens, and you can divide 24 tens by 4. The result 6 tens goes as part of the quotient.

Guided Practice

Day 3/ Lesson 3: 30 Mins

1. How to divide a three-digit number by a one-digit number (for example, 416 ÷ 7).
2. Place the divisor (7) before the division bracket and place the dividend (416) under it:

7)416

3. Examine the first digit of the dividend (4). It is smaller than 7 so it can't be divided by 7 to produce a whole number.
4. Next take the first two digits of the dividend (41) and determine how many 7's it contains. In this case 41 holds five sevens (5*7=35) but not six (6*7=42).
5. Place the 5 above the division bracket.

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  5
7)416
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Multiply the 5 by 7 and place the result (35) below the 41 of the dividend.

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  5
7)416
  35
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6. Draw a line under the 35 and subtract it from 41 (41-35=6). Bring down the 6 from the 416 and place it to the right of the 6.

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  5
7)416
 35
 66
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7. Multiply the 9 of the quotient by the divisor (7) to get 63 and place this below the 63 under the dividend. Subtract 63 from 63 to give an answer of 3. The number 3 is called the remainder and indicates that there were three left over.

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  59 R3
7)416
 35
 66
 63
  3
```

Therefore, 416÷7 = 59 R 3

groups would you have? The 9 represents how many items in each group.

10. Ask: What is the answer to 54 divided by 9? The answer is 6.

Guided Practice

Day 4/ Lesson 4: 15 Mins

1. (i) When any number is divided by 1, the quotient is the number itself.

(a) 7 ÷ 1 = 7

(b) 53 ÷ 1 = 53

(c) 275 ÷ 1 = 275

(ii) When a number (except 0) is divided by itself, the quotient is 1.

(a) 7 ÷7 = 1

(b) 53 ÷ 53 = 1

(c) 275 ÷ 275 = 1

When a number is divided by 10, the digits, except the digit at the one's place, make the quotient and the digit at one's place becomes the remainder.

As for example:

(i) 48 ÷ 10

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  4
10)48
- 40
  8
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Therefore we have 4 Remainder 8.

(ii) 492 ÷ 10

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  49
10)492
 -40
  92
 -90
   2
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9.Check the final answer: 4 × 62 = 248.		
Assessment Activity	Assessment Activity Write down these questions on the board for the students to solve. Ask them to use long division method and to Divide from left to right, and carry where needed (short division method). 1. 108 ÷ 3 2. 612 ÷ 6 3. 545 ÷ 5 4. 693 ÷ 3 5. 900 ÷30 6. 320 ÷ 80	Assessment Activity
Summary	Review and Closing 1. Bring the students back to the class meeting area. 2. Ask for volunteers to share their answers and work for the problems assigned. 3. As the problems are reviewed in front of the class, the students will check their answers for accuracy. 4. After each problem has been checked for accuracy, review the process and algorithm for performing long division. 5. Ask the class if there are any questions or comments about long division.	