

COUNTING IN THOUSANDS AND MILLIONS

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Subject

Mathematics

Prepared By

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Grade Level

4

Overview

This lesson plan covers teaching content for;

1. Counting in thousands and millions.
2. Applying counting of large numbers.

Objectives

Students should be able to;

1. Count in thousands and millions.
2. Apply counting of large numbers.
3. Solve quantitative aptitude related to thousands and millions.

Activity Starter/Instruction

1. With the pupils, practice counting in 10s, starting from any two-digit number.
2. Then count in 10s starting from any three-digit and then any four-digit number.
3. Repeat this activity, first counting in 5s, then in 100s, and finally in 1 000s. Make sure that the pupils are clear about what happens at the place value bridges (for example 99 to 100, 999 to 1 000, 9 999 to 10 000 and 99 999 to 100 000).

Guided Practice

Day 2/ Lesson 2: 15 Mins

1. Practice place values of numbers up to 100 000.
2. Design photocopiable place value tables and give a copy to each pupil.
3. Call out a few large numbers and have pupils write the numbers under their correct place values on their tables.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Demonstrate counting forwards and backwards using a number line. Write 997 and 998 on the middle of the line. Then, count forwards with the pupils, writing down the numbers as they are said.
2. Point out where the number of digits' changes from three digits to four digits.
3. Next, write the numbers 1 002 and 1 003 on the middle of the number line. This time, count backwards and point out where the number of digits' changes from four digits to three digits.
4. Repeat this activity for the 9 999 to 10 000 and 99 999 to 100 000 bridges.
5. Now practice counting in 2s, 5s, 10s, 100s and 1 000s, starting at different points.
6. Use the number line as support, and point to each mark as you count. Make sure the pupils can also count backwards over these bridges.
7. Write a number on the number line, for example 10 003, and ask the pupils if they know what 5 less than this number is. If necessary, count backwards together.

Materials Required

- Place value cards
- Number lines that are marked, but not numbered, over the place value boundaries.
- Abacus

Additional Resources

- <https://www.brighthubeducation.com/esl-lesson-plans/76105-teach-your-esl-students-to-count-to-a-million/>
- <https://www.education.com/lesson-plan/many-many-millions/>
- <https://www.teacher.org/lesson-plan/the-value-of-a-number/>
- <https://www.scholastic.com/teachers/articles/18-19/grades-4-5-lessons-place-value/>

Additional Notes

Activity Starter

1. Bring newspapers or magazines or any other sources of media found in real life and ask pupils to look up word numbers and figure numbers.
2. Ask them to explain the context in which these numbers are used in the media.

Summary

1. Ask for volunteers to share their answers to the problems assigned.
2. As the problems are reviewed in front of the class, have the students check their answers for accuracy.

4. Demonstrate that the pupil's place value table can be extended to an extra place value for millions.
5. Explain how the number 94 613 can be placed on the place value table by including the place holder, 0, for 100 000s and 1 000 000s.
6. Also point out that 94 613 is less than 100 000 and 1000 000

Guided Practice

Day 4/ Lesson 4: 15 Mins

1. Explain the concept of place values again and this time, emphasize the notion of a place holder and how it works.
2. For example, explain that a number like 9008 contains only thousands and units – hundred and tens have no value in this particular number.
3. Now explain how large numbers are put into words by reading the number from left to right e.g. 2 014 867 has 2 million, 0 hundred thousand, 1 ten thousand, 4 thousand, 8 hundred, 6 tens and 7 units. Therefore, it is written as “two million, fourteen thousand, eight hundred and sixty-seven.

Assessment Activity

1. Pupils should understand the use of place holders in large numbers.
2. Pupils should be able to write large numbers in words.
3. Pupils can work in pairs and write numbers for each other

Guided Practice

Day 3/ Lesson 3: 15 Mins

1. Demonstrate how to count forward and backward in millions.
2. At first, concentrate on rounded values i.e. 1 000 000, 2 000 000, etc.
3. Follow this by counting in the intermediate million values i.e. 1 100 000, 2 100 000, etc.
4. Pupils should count forward and backward in these intermediate numbers.
5. Introduce the copies of the paper abacus (you might want to have printed copies of these for each pupil).
6. Show how place values can be identified on the abacus by means of coloring the appropriate number of abacus beads.
7. In particular, show the pupils how the abacus matches the columns of the place value table.

Assessment Activity

1. Pupils to find out how many minutes there are in July.
2. Ask pupils to research and find out the distance of all the planets from the Sun.