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FREE LEARNING NOTES FOR ZAMBIA

GRADE 2 · TERM 1

Mathematics

# Numbers up to 999

Lesson notes for learners · Competence-Based Curriculum

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We use numbers every day. We count pencils, money and books. In this note you will count and read numbers up to 999, write them in numerals and in words, count in tens and hundreds, and learn place value.

**AFTER THESE NOTES YOU SHOULD BE ABLE TO**

- Count and read numbers up to 999
- Write numbers in numerals and in words
- Count in tens and hundreds up to 1000
- Name hundreds, tens and ones and write numbers in expanded form

**KEY WORDS**

| | |
|---|---|
| **Number** | A symbol that shows how many. |
| **Counting** | Finding how many by saying a number for each item in order. |
| **Place value** | The value a digit has because of where it stands in a number. |
| **Expanded notation** | A number written as the value of each digit added together. |

## 1 Counting and writing numbers

How many pencils can you see. If your teacher gives you two more, how many will you have now. Numbers show how many.

Count aloud from 1 to 99, then on to 999. Use a number chart, a number line or counting objects such as stones, bottle tops, sticks and beans. Read the numbers your teacher points to.

We can write a number in numerals and in words. 15 is fifteen. 248 is two hundred and forty-eight. Match each numeral to its number name. You can use this skill to write amounts of money.

## 2 Counting in tens and hundreds

Count in tens: 10, 20, 30, and so on up to 1000. Count in hundreds: 100, 200, 300, and so on up to 1000. Listen for the pattern. Your teacher gives you a starting number and you continue counting.

Fill in the missing numbers in a sequence. Try counting money or groups of items in tens.

| Counting in tens | Counting in hundreds |
|---|---|
| 10 | 100 |
| 20 | 200 |
| 30 | 300 |
| 40 | 400 |

**Figure 1.** Counting in tens and in hundreds

## 3 Place value

A three-digit number has hundreds, tens and ones. Look at 345 and 608. A digit has a value because of its place. You can see the places on a place value chart (H, T, O), on an abacus with beads for hundreds, tens and ones, or in a number box that breaks a number into parts.

Take the number 354. It has 3 hundreds, 5 tens and 4 ones.

| Number | Hundreds | Tens | Ones |
|---|---|---|---|
| 345 | 3 | 4 | 5 |
| 608 | 6 | 0 | 8 |
| 354 | 3 | 5 | 4 |

**Figure 2.** Place value chart

## 4 Expanded notation

Expanded notation shows the value of each digit. We can write 354 without words as 300 + 50 + 4. We can write it with words as 3 hundreds + 5 tens + 4 ones. Another example is 800 + 50 + 4, which is 8 hundreds + 5 tens + 4 ones.

Write the hundreds, tens and ones for a number. Then write it in expanded notation. Read it aloud and explain your answer.

**TRY THIS**

Count the beans or stones in a small pile at home. Write the number in numerals and in words. Then tell your family how many hundreds, tens and ones it has.

**REMEMBER**

- We count and read numbers up to 999
- We write numbers in numerals and in words, for example 15 is fifteen
- We count in tens and in hundreds up to 1000
- A three-digit number has hundreds, tens and ones
- Expanded notation: 354 is 300 + 50 + 4

## ? Check yourself

1. Write 15 in words.
2. What comes after 40 when we count in tens.
3. What comes after 300 when we count in hundreds.
4. How many tens are in 354.
5. Chanda has 248 bottle tops in a box for her class game. Her teacher asks her to write the number and say its parts. (a) Write 248 in words. (b) How many hundreds does it have. (c) How many ones does it have.
6. Mwila writes the number 608 on her place value chart. Her teacher asks her to explain each place and then write it in expanded notation. (a) How many hundreds. (b) How many tens. (c) Write 608 as 600 + something + something.

**ANSWERS**

1. Fifteen.
2. 50.
3. 400.
4. 5 tens.
5. (a) Two hundred and forty-eight. (b) 2 hundreds. (c) 8 ones.
6. (a) 6 hundreds. (b) 0 tens. (c) 600 + 0 + 8.

Written by 25Schools to follow the Grade 2 Mathematics syllabus of the Zambian competence-based curriculum. Free for learners to read, download and share. More notes and quizzes at 25schools.com.