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FREE LEARNING NOTES FOR ZAMBIA

GRADE 2 · TERM 2

Mathematics

Subtraction

Lesson notes for learners · Competence-Based Curriculum

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We subtract when we give away mangoes, sell sweets or spend money at the market. In this note you will learn to take away numbers, and to borrow when the ones are not enough. Use counters or bottle tops to feel each step.

AFTER THESE NOTES YOU SHOULD BE ABLE TO

- Subtract numbers up to 99 and borrow when needed
- Subtract numbers up to 999 in a vertical way
- Subtract using expanded notation
- Use number trees, magic squares and number games to subtract

KEY WORDS

Subtraction	Taking a number away from another number.
Borrowing	Taking 1 from the next place value.
Expanded notation	Writing a number to show the value of each digit.
Number tree	Breaking a number into parts.

1 Borrowing when the ones are not enough

Take 15 from 32. We cannot take 5 ones from 2 ones. So we borrow 1 ten and change it into 10 ones.

After borrowing we have 2 tens and 12 ones. Subtract the ones: 12 take away 5 is 7. Subtract the tens: 2 tens take away 1 ten is 1 ten. The answer is 17.

Use bundles of ten and loose counters. Break one bundle into 10 single counters and count again. Borrow only when the ones are not enough.

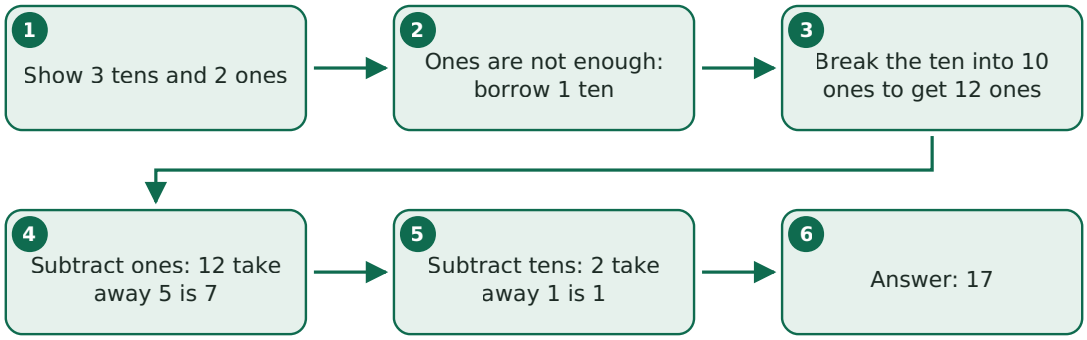


Figure 1. Steps for 32 take away 15

2 Subtracting up to 999

Write the bigger number on top and the smaller number below it. Hundreds go under hundreds, tens under tens, ones under ones. Start with the ones, then the tens, then the hundreds.

A shop had 356 sweets and sold 124. Ones: 6 take away 4 is 2. Tens: 5 take away 2 is 3. Hundreds: 3 take away 1 is 2. The shop has 232 sweets left.

Chipo had 345 groundnuts and gave away 123. Nothing needs borrowing here. 345 take away 123 leaves 222.

When a digit on top is too small, borrow. Exchange 1 hundred for 10 tens, or 1 ten for 10 ones. Try 402 take away 187.

Place	356	124	Left
Hundreds	3	1	2
Tens	5	2	3
Ones	6	4	2

Figure 2. 356 take away 124

3 Subtracting with expanded notation

Expanded notation shows the value of each digit. 468 is 400 and 60 and 8. 235 is 200 and 30 and 5.

Subtract each part. 400 take away 200 is 200. 60 take away 30 is 30. 8 take away 5 is 3. Put the parts together: 233.

When borrowing is needed, regroup first. 402 can be written as 300 and 90 and 12. 187 is 100 and 80 and 7.

Place	468	235	Left
Hundreds	400	200	200
Tens	60	30	30
Ones	8	5	3

Figure 3. 468 take away 235 in parts

4 Fun ways to subtract

A number tree breaks a number into parts. 345 breaks into 300 and 40 and 5. You can show it with sticks tied in bundles.

A magic square is a grid of 3 rows and 3 columns. The rows and columns must give the same answer after subtraction.

Number games use dice, cards or counters. Play with a friend and say each subtraction aloud.

TRY THIS

Count 32 bottle tops or stones as 3 groups of ten and 2 singles. Take away 15. Borrow a ten when you need to. Tell someone at home how you did it.

REMEMBER

- Subtraction means taking away
- Borrow 1 ten when the ones are not enough
- Start with ones, then tens, then hundreds
- Expanded notation shows the value of each digit
- Number trees, magic squares and number games help us practise

? Check yourself

1. Why do we borrow when we take 5 from 2 ones.
2. What is 356 take away 124.
3. Write 468 in expanded notation.

4. Which place do we subtract first.
5. Mulenga has 45 mangoes and gives away 18. His teacher asks how many are left. (a) Do we need to borrow. (b) Why. (c) How many mangoes are left.
6. A farmer harvested 825 maize cobs and sold 347. A learner is asked to find how many remain. (a) Which place do we start with. (b) Do we borrow. (c) How many cobs remain.

ANSWERS

1. Because there are not enough ones, so we change 1 ten into 10 ones.
2. 232.
3. 400 and 60 and 8.
4. The ones.
5. (a) Yes. (b) We cannot take 8 ones from 5 ones. (c) 27.
6. (a) The ones. (b) Yes. (c) 478.

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.