



Student Name: _____

Class: _____

Student ID: _____

Date: {{DATE}}

Assessment Details

Duration: 30 minutes

Total Marks: 100

Topics Covered:

- Place Value
- Multi-digit Numbers
- Base-ten Blocks
- Visual Modeling

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Use base-ten blocks or visual aids to support your answers where necessary.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Section A: Multiple Choice Questions [20 marks]

Question 1

[2 marks]

What is the value of the digit 5 in the number 456?

A) 5 ones

B) 5 tens

C) 5 hundreds

D) 5 thousands

Question 2

[2 marks]

If a number has a 3 in the tens place, what is the value of the 3?

A) 3 ones

B) 3 tens

C) 3 hundreds

D) 3 thousands

Question 3

[2 marks]

What is the relationship between the digits in the number 123?

A) The digit in the ones place is ten times the digit in the tens place

B) The digit in the tens place is ten times the digit in the ones place

C) The digit in the hundreds place is ten times the digit in the tens place

D) The digit in the tens place is equal to the digit in the ones place

Question 4

[10 marks]

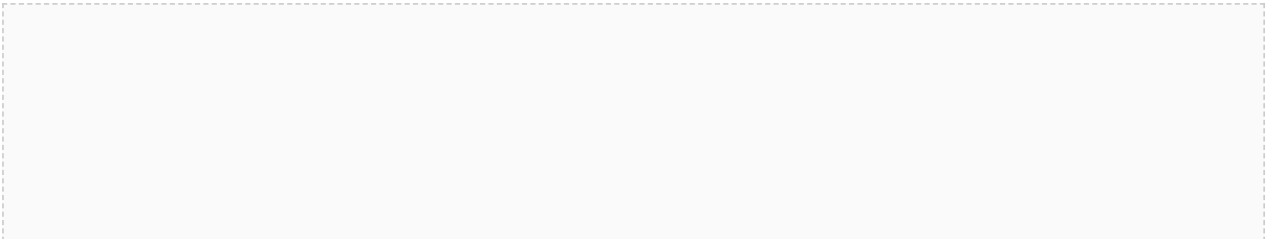
Explain the concept of place value in your own words. Be sure to include an example to support your explanation.



Question 5

[10 marks]

How does the value of a digit change when it is moved from the ones place to the tens place? Use a diagram to illustrate your answer.



Question 6

[10 marks]

Use base-ten blocks to represent the number 456. Label each block with its corresponding value.



Question 7

[10 marks]

Create a diagram to show the relationship between the digits in the number 123. Use arrows to illustrate how the value of each digit changes when it is moved to a different place.



Question 8

[10 marks]

Use real-world objects to model the concept of place value. For example, you can use coins or blocks to represent different place values.



Marking Guide

Multiple Choice Questions: 1 point for each correct answer	Short Answer Questions: 10 points for each question, broken down into:
	• 5 points for clarity and accuracy of explanation
	• 3 points for inclusion of relevant examples or diagrams
	• 2 points for organization and coherence of response
Visual Modeling Questions: 10 points for each question, broken down into:	
• 5 points for accuracy and completeness of model	
• 3 points for clarity and effectiveness of labeling and arrows	
• 2 points for creativity and originality of model	

Implementation Guidelines

The assessment will be administered in a 30-minute period, with the following time allocation:

- Multiple Choice Questions: 10 minutes
- Short Answer Questions: 10 minutes
- Visual Modeling Questions: 10 minutes

Teachers are advised to provide clear instructions and examples before the assessment, and to circulate around the room to provide support and answer questions as needed.

Differentiation Options

To cater to diverse learners, the following differentiation options can be implemented:

- For students with visual impairments: provide large print or braille versions of the assessment, or offer assistive technology such as text-to-speech software.
- For English language learners: provide bilingual versions of the assessment, or offer visual aids and graphic organizers to support understanding.
- For students with learning difficulties: provide extra time to complete the assessment, or offer one-on-one support and accommodations such as a reader or scribe.

Additional Resources

For teachers, the following additional resources are available to support the implementation of this assessment:

- A teacher's guide with detailed instructions and examples
- A student workbook with practice questions and activities
- A set of base-ten blocks and other manipulatives to support visual modeling

Conclusion

In conclusion, this assessment is designed to evaluate your understanding of 4th grade Number Sense and Operations in Base Ten, while also providing opportunities for feedback and differentiation. By incorporating Multiple Choice, Short Answer, and Visual Modeling questions, the assessment will cater to different learning styles and abilities, and provide a comprehensive evaluation of your learning.