



Introduction

Welcome to this welcome pack, where we will explore the concept of multi-digit addition with regrouping and its real-world applications.

This pack is designed for UK Primary School students and includes mixed ability differentiation to cater to foundation, core, and extension learners.

What is Multi-Digit Addition with Regrouping?

Multi-digit addition with regrouping is a mathematical concept that involves adding numbers with more than one digit.

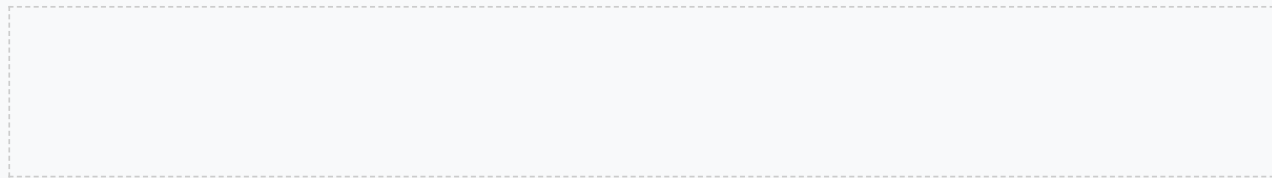
It requires regrouping numbers in different places, such as the tens and hundreds places, to find the correct answer.

Foundation Level

For foundation learners, we will start with simple multi-digit addition problems, such as:

1. $45 + 27 = ?$

2. $56 + 19 = ?$



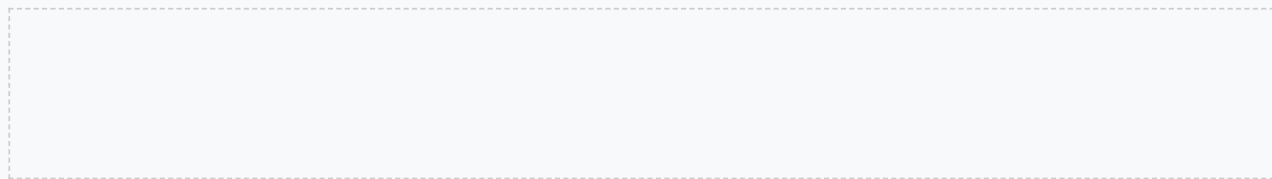
Use base-ten blocks or number lines to help you solve these problems.

Core Level

For core learners, we will move on to more complex multi-digit addition problems, such as:

1. $456 + 279 = ?$

2. $234 + 147 = ?$



Use visual aids, such as diagrams or charts, to help you solve these problems.

Extension Level

For extension learners, we will explore more challenging multi-digit addition problems, such as:

1. $456 + 279 + 135 = ?$

2. $234 + 147 + 93 = ?$

Use mental math or estimation to help you solve these problems.

Real-World Applications

Multi-digit addition with regrouping has many real-world applications, such as:

- Calculating the total cost of a shopping list
- Finding the total number of students in a school
- Determining the total distance traveled on a road trip

Activities

Complete the following activities to practice multi-digit addition with regrouping:

1. Multi-Digit Addition with Regrouping Worksheet
2. Real-World Application Scenario
3. Math Games

Multi-Digit Addition with Regrouping Worksheet

Complete the following worksheet:

Problem	Answer
$45 + 27 = ?$	
$56 + 19 = ?$	
$456 + 279 = ?$	
$234 + 147 = ?$	

Real-World Application Scenario

Read the following scenario and use multi-digit addition with regrouping to find the answer:

A bookshop has 456 books on one shelf and 279 books on another shelf. How many books does the bookshop have in total?

Math Games

Play the following math games to practice multi-digit addition with regrouping:

1. Math Bingo
2. Math Scavenger Hunt
3. Math War

Assessment

Complete the following assessment to evaluate your understanding of multi-digit addition with regrouping:

1. Quiz
2. Project
3. Reflection

Quiz

Complete the following quiz:

Problem	Answer
$45 + 27 = ?$	
$56 + 19 = ?$	
$456 + 279 = ?$	
$234 + 147 = ?$	

Conclusion

In conclusion, understanding multi-digit addition with regrouping is a crucial concept in mathematics, and it has many real-world applications.

By practicing and applying this concept, you will become more confident and proficient in math.

Next Steps

Next, you will learn about:

1. Multi-Digit Subtraction with Regrouping
2. Multi-Digit Multiplication and Division
3. Real-World Applications of Multi-Digit Operations

Glossary

The following terms are used in this pack:

- Multi-digit addition: The process of adding numbers with more than one digit.
- Regrouping: The process of carrying over numbers from one place value to the next.
- Place value: The value of a digit depending on its position in a number.

Resources

The following resources are available to support your learning:

- Base-ten blocks
- Number lines
- Diagrams and charts
- Math games and activities
- Online resources and apps

Parent Guidance

As a parent, you can support your child's learning by:

- Encouraging your child to practice multi-digit addition with regrouping regularly.
- Using real-world examples to illustrate the concept.
- Providing feedback and support as needed.

Teacher Guidance

As a teacher, you can support your students' learning by:

- Using mixed ability differentiation to cater to foundation, core, and extension learners.
- Providing opportunities for students to apply their knowledge to real-world scenarios.
- Using a range of teaching strategies, including visual aids, games, and activities.

