PLANIT TEACHERS

Student Name: _____

Class: _____

Due Date: _____

Introduction to Adaptive Homework

Introduction:

Adaptive homework is an essential tool for enhancing student learning and engagement. By tailoring assignments to individual students' needs, abilities, and learning styles, teachers can promote a more effective and enjoyable learning experience.
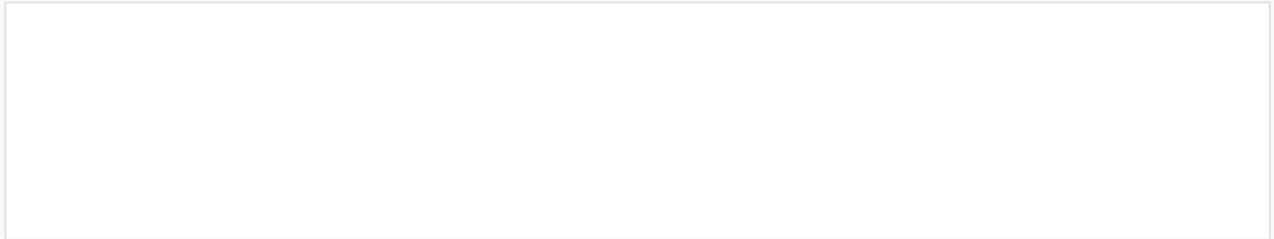
Learning Objectives:

1. Reinforce understanding of addition and subtraction facts in multiples of 10
2. Develop fluency in mental math calculations involving multiples of 10
3. Apply problem-solving skills to real-world scenarios involving multiples of 10
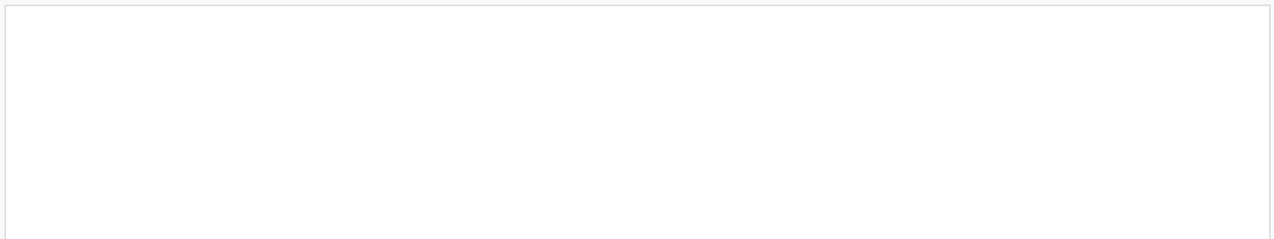
Visual Learning:

Complete the multiples of 10 chart below, filling in the missing numbers in the pattern. Use different colors to highlight the addition and subtraction facts.

Multiples of 10 Addition Facts Subtraction Facts

Multiples of 10	Addition Facts	Subtraction Facts
10	10 + 10 =	20 - 10 =
20	20 + 10 =	30 - 10 =
30	30 + 10 =	40 - 10 =
40	40 + 10 =	50 - 10 =
50	50 + 10 =	60 - 10 =

Auditory Learning:

Listen to a math podcast or video that explains addition and subtraction facts in multiples of 10. Take notes on key concepts and provide a short summary.
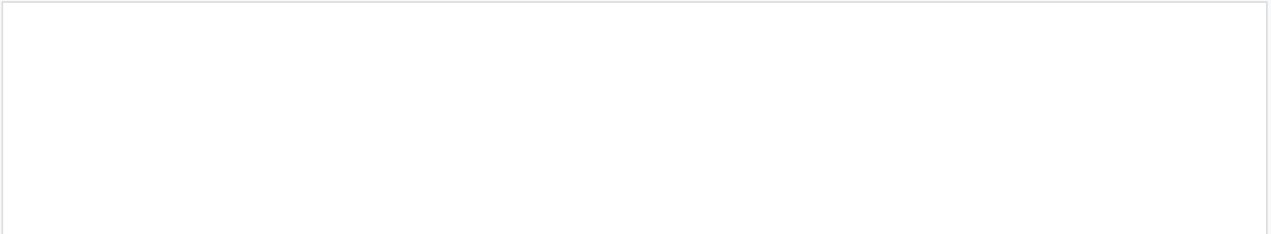
Create a Real-World Scenario:

Create a real-world scenario involving multiples of 10, such as buying items in bulk or measuring lengths in meters. Write a short story or create a diagram to illustrate the scenario.
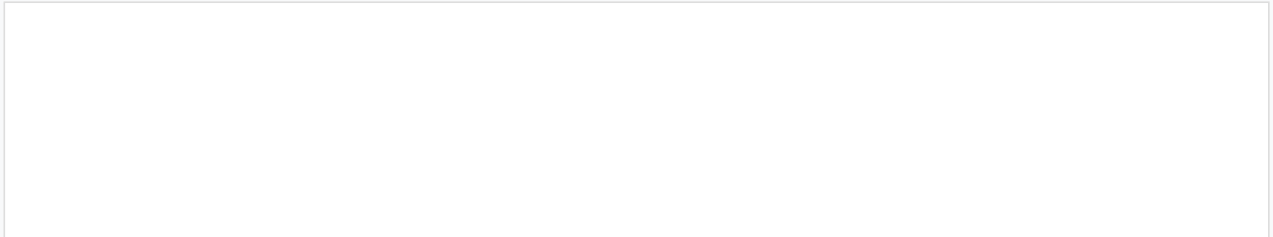
Mental Math:

Complete the following mental math questions involving addition and subtraction facts in multiples of 10.

1. 10 + 10 =
2. 20 - 10 =
3. 30 + 10 =
4. 40 - 10 =
5. 50 + 10 =

Game-Based Learning

Play an Online Math Game:

Play an online math game or use a mobile app that focuses on addition and subtraction facts in multiples of 10. Reach a certain level or score to demonstrate mastery.

Resources and Materials:

Multiples of 10 chart printout, math podcast or video, pencil, paper, and colored pencils, timer, online math game or mobile app

Guidance for Parents or Guardians

Supporting Your Child:

To support your child without doing the work for them:

1. Encourage your child to read the instructions carefully and ask questions if needed
2. Provide a quiet and comfortable workspace for your child to complete the assignment
3. Offer guidance on time management and organization
4. Review your child's work and provide feedback, but avoid giving away answers or solutions

Reflect on Your Learning:

After completing the assignment, take a few minutes to reflect on your learning:

1. What did you learn about addition and subtraction facts in multiples of 10?
2. What challenges did you face, and how did you overcome them?
3. What would you like to learn more about in future assignments?

Additional Resources

Additional Resources:

For teachers looking to expand on this assignment or provide additional support, consider the following resources:

- National Council of Teachers of Mathematics (NCTM)
- Khan Academy
- Math Playground

Conclusion

Conclusion:

By providing a personalized and adaptive homework assignment, we can help students develop a deeper understanding of addition and subtraction facts in multiples of 10. By incorporating different learning styles, real-world scenarios, and gradual increases in difficulty, we can promote a more engaging and effective learning experience.

Activity 1: Multiples of 10 Pattern

Complete the pattern below by filling in the missing numbers.

10, 20, 30, 40, 50, _____

Activity 2: Word Problems

Solve the following word problems involving addition and subtraction facts in multiples of 10.

1. Tom has 30 pencils in his pencil case. He adds 10 more pencils. How many pencils does Tom have now?
2. Sarah has 50 crayons in her box. She gives 10 crayons to her friend. How many crayons does Sarah have left?

Activity 3: Mental Math

Mental Math Questions:

Complete the following mental math questions involving addition and subtraction facts in multiples of 10.

1. 10 + 10 =
2. 20 - 10 =
3. 30 + 10 =
4. 40 - 10 =
5. 50 + 10 =

Activity 1: Multiples of 10 Pattern

60

Activity 2: Word Problems

1. Tom has 40 pencils now.
2. Sarah has 40 crayons left.

Activity 3: Mental Math

1. 20
2. 10
3. 40
4. 30
5. 60