DMT INSTITUTE

Developing Mathematical Thinking Institute (DMTI)

Professional Development

Curricular Resources

Assessment

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DMTI Varied Practice Worksheets

This PowerPoint or PDF displays the worksheets that have varied situations (context, visual, equations, and other mathematical models) for children to work on. By completing these worksheets, children increase their foundational skills in the topic, which will help them with these standards and future mathematical topics.

1. If using a journal, have children present the worksheet and complete all the problems.

2. Or print the 'Varied Practice Worksheet Slides' for them to work on. Then, you can return to the PowerPoint or PDF to look at the keys to check their work.

Grade 1 – Misconceptions Part 1

NUMBER AND OPERATIONS

Grade 1: Misconceptions Pt. 1 – Number and Operations
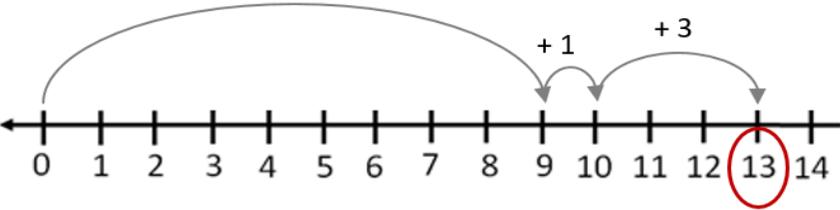
Materials Needed

Printed copies of the Number Misconceptions varied practice sheet.

Instructions

1. Read the description of each task.

2. Explain to students that the given answer is not correct.

3. Have students provide the correct answer and explain why the incorrect answer given may have occurred.

4. Space is provided to note what students say in response or to have them attempt to write their response.

5. Adults may want to use a piece of paper to cover each row so that the student sees only one task at a time.

Example:

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
What number is next in the pattern? 2, 12, 22, 32, 42, _____	*43 is next in the pattern.*	*The next number in the pattern is 52.*	*The pattern is to count by 10 starting at 2. After 42 would be 52. 43 is just one more than 42, not 10 more.*

Name: _____

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
What number is next in the pattern? 3, 13, 23, 33, 43, _____	*44 is next in the pattern.*		
Marco said that because he knows 9 + 1 = 10, he knows 9 + 3 = 13. He used a number line to show his thinking. 	*9+3 = 13 because 9+1 = 10 and 10+3 = 13*		
What number is missing? $5 + 2 = \boxed{} + 3$	*The missing number is 7 because 5+2=7.*		

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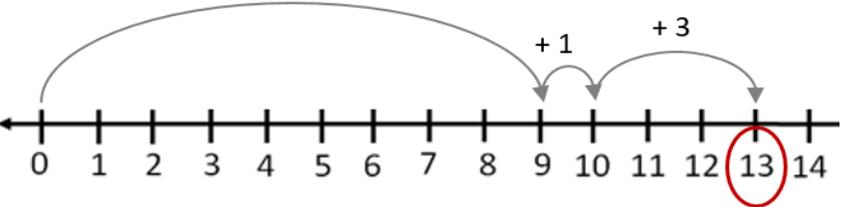Professional Development

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"The Developing Mathematical Thinking Institute (DMTI) is dedicated to enhancing students' learning of mathematics by supporting educators in the implementation of research-based instructional strategies through high-quality professional development, curricular resources and assessments."

For more information contact
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Answers may vary.

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
What number is next in the pattern? 3, 13, 23, 33, 43, _____	*44 is next in the pattern.*	*The next number in the pattern is 53.*	*The pattern is to count by 10 starting at 3. 10 more than 43 is 53. The next number in the pattern would only be 44 if you were counting by one.*
Marco said that because he knows 9 + 1 = 10, he knows 9 + 3 = 13. He used a number line to show his thinking. 	*9+3 = 13 because 9+1 = 10 and 10+3 = 13*	*9+3 = 12*	*If you decompose 3 in to 1 and 2, you can make 10 starting at 9. 9 + 1 = 10, but then you only add 2 more to 10. 10 + 2 = 12, so 9 + 3 = 12.*
What number is missing? 5 + 2 = ☐ + 3	*The missing number is 7 because 5+2=7.*	*The missing number is 4.*	*The equal sign means that both sides of the equation are the same. If 2 goes up by 1 to 3, then the 5 needs to go down by 1 to 4.*