

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 K – Misconceptions Part 1

NUMBER AND OPERATIONS

Grade K: Misconceptions Pt. 1 – Number and Operations

Materials Needed


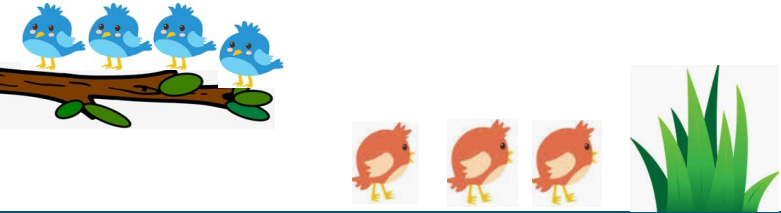
Printed copies of the Number Misconceptions varied practice sheet.

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.
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? 0, 2, 4, 6, 8, ___	<i>9 is next in the pattern.</i>	<i>The next number in the pattern is 10.</i>	<i>The pattern is to count by 2. After 8, 2 more is 10. The only pattern that has 9 come after 8 is if you're counting by one.</i>

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
<p>What number is next in the pattern?</p> <p>0, 10, 20, 30, 40, ____</p>	<p><i>41 is next in the pattern.</i></p>		
<p>There are 7 ladybugs in all. You can see 3 and the rest are hiding in the grass. How many ladybugs are hiding in the grass so you can't see them?</p> 	<p><i>There are 10 ladybugs hiding in the grass.</i></p>		
<p>How many more birds are in the tree than on the ground?</p> 	<p><i>There are 4 more birds in the tree than on the ground.</i></p>		




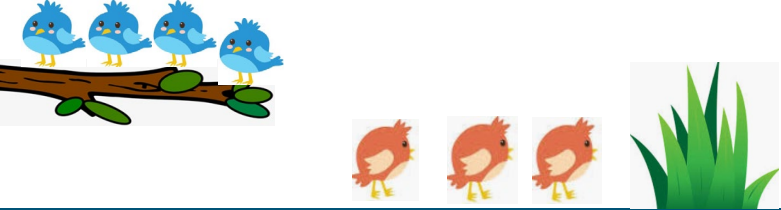
“The Developing Mathematical Thinking Institute (DMTI) is dedicated to enhancing students’ learning of mathematics by supporting educators in the implementation of research-based instructional strategies through high-quality professional development, curricular resources and assessments.”

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KEY

Answers may vary.

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
<p>What number is next in the pattern?</p> <p style="text-align: center;">0, 10, 20, 30, 40, ____</p>	<p><i>41 is next in the pattern.</i></p>	<p><i>The next number in the pattern is 50.</i></p>	<p><i>The pattern is to count by 10's. After 40, 41 only comes next if you're counting by one.</i></p>
<p>There are 7 ladybugs in all. You can see 3 and the rest are hiding in the grass. How many ladybugs are hiding in the grass so you can't see them?</p> 	<p><i>There are 10 ladybugs hiding in the grass.</i></p>	<p><i>There are 4 ladybugs hiding in the grass.</i></p>	<p><i>The 7 ladybugs is the number of all the ladybugs. The 3 is part of the 7 so the missing part is 4.</i></p>
<p>How many more birds are in the tree than on the ground?</p> 	<p><i>There are 4 more birds in the tree than on the ground.</i></p>	<p><i>There is 1 more bird in the tree than on the ground.</i></p>	<p><i>The problem is to find how many more birds are in the tree than on the ground, not how many birds are in the tree.</i></p>