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 5 – Misconceptions Part 1

NUMBER AND OPERATIONS

Grade 5: 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 for students 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?
Which number is the greatest? $1\frac{2}{3}$ $1\frac{1}{2}$ 2	*$1\frac{2}{3}$ is the greatest number.*	*2 is the greatest amount.*	*Even though there are two mixed numbers, 2 is the greatest whole number. Because the fractions that are part of the mixed numbers are less than 1, neither mixed number is greater than 2.*

Name: _____

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
Which number is the greatest? $1\frac{9}{10}$ $2\frac{1}{2}$ $1\frac{99}{100}$	*$1\frac{99}{100}$ is the greatest number.*		
Solve 0.9 + 0.5. 0.9 + 0.5 = ____	*0.9 + 0.5 = 0.14*		
What number is missing? $\frac{1}{2} + \frac{1}{2} = \square + \frac{1}{4}$	*The missing number is $\frac{2}{4}$ because $\frac{1}{2} + \frac{1}{2} = \frac{2}{4}$.*		

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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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KEY

Answers may vary.

Task	Incorrect Response	Correct Answer	Why did the student get the wrong answer?
Which number is the greatest? $1\frac{9}{10}$ $2\frac{1}{2}$ $1\frac{99}{100}$	$1\frac{99}{100}$ *is the greatest number.*	$2\frac{1}{2}$ *is the greatest number.*	*Even though the numbers are all mixed numbers, 2 is the greatest whole number. Because the other fractions that are part of the mixed numbers are less than 1, neither mixed number has a whole number greater than 2.*
Solve 0.9 + 0.5. 0.9 + 0.5 = ____	*0.9 + 0.5 = 0.14*	*0.9 + 0.5 = 1.4*	*When you add 9 units one-tenth to 5 units of one-tenth, you have a sum of 14 units of one-tenth. That means you have composed 1 whole unit of one with 4 tenths left over.*
What number is missing? $\frac{1}{2} + \frac{1}{2} = \square + \frac{1}{4}$	*The missing number is* $\frac{2}{4}$ *because* $\frac{1}{2} + \frac{1}{2} = \frac{2}{4}$.	*The missing number is* $\frac{3}{4}$.	*Because* $\frac{1}{2} + \frac{1}{2} = 1$, *the missing number must compose 1 when added to* $\frac{1}{4}$. $\frac{3}{4} + \frac{1}{4} = 1$.