



## **TOOL // Math Problem Solving Template**

### **What is it used for?**

The tool scaffolds student process while solving problems. It provides the teacher with a record of student performance that lends itself to descriptive, specific feedback to students.

### **How do you use it?**

This template helps to promote the Growth Mind Set philosophy of mathematics. Students are encouraged to consider the problem and then select from a finite number of possible strategies by circling which one they think is best for this type of problem. This proves helpful in getting them started to 'put pencil to paper'. If the chosen strategy proves difficult, they can select another, but will often gain insight simply from 'trying something'. As they work, students can describe their thinking using the prompts that have been provided, or they can write their own ideas. These prompts help scaffold student development of good communication in mathematics. When the teacher is conferencing with the student regarding their problem solving specific, descriptive feedback can be provided on the template for students to refer to next time. Pictures can be taken and stored in the students' online portfolios. This provides a record of student performance but also allows for comparisons to see how well students respond to feedback.

CHALLENGE: \_\_\_\_\_

Name(s):

My/Our Strategy is:

TRY DIFFERENT OPERATIONS

DRAW A DIAGRAM

SOLVE AN EASIER PROBLEM

MAKE A TABLE

LOOK FOR PATTERNS

GUESS & CHECK

SOLVE STEP-BY-STEP

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WORK:

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EXPLANATION (“Why”): e.g. “I chose the strategy of \_\_\_\_\_ because...” “I \_\_\_\_\_ because the question said...” “First, I \_\_\_\_\_ because...” “My answer is reasonable because...” “One problem I had was \_\_\_\_\_” “My first try didn’t work because...”

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ANSWER (Full sentence using words from the question):