This template is designed to help teachers create SAOs. A complete SAO must include the planning information found in the SAO instructional guide.

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| **Course/Grade Level Information**  |
| Course Name | Mathematics  |
| Brief Course Description | The hour long math time in second grade is used to teach students the grade level domains in math. Students are expected to recall facts and apply their knowledge of skills and concepts in problem solving situations. |
| Grade Level(s) | Grade 2 |
| Course Length | Year-long |

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| **Process, Implementation Timeline, and Sign-Offs** |
| List the names and current job positions of those developing this SAO. | Jeff Sampson, Grade 2 TeacherJanine Richards, Grade 2 TeacherLynn Franklin, Grade 2 Teacher |
| Administrator Name & Title | Dr. Thompson |
| Administrator sign-off of initial SAO |   |

**Directions for Establishing a Learning Goal:** Use the planning information and the SMART Review to refine and tailor the description of the learning goal you described**.**

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| **Learning Goal:** a description of the enduring understandings or big ideas that students will possess at the end of the course or grade based on course- or grade-level content standards and curriculum. |
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| **Learning Goal for this SAO:** |
| Describe the **learning goal** for this SAO. | Students in grade 2 will apply operations (+/-) to independently solve problems within a real or fictional context and show their thinking using more than one strategy (picture, number line, part-part-whole diagram, equation). |

*\*See planning pages*

**Directions for Documenting Assessments and Scoring:** Use the planning information to refine and tailor the description and use of assessments you described.

| **Assessments and Scoring:** Assessments should be of high quality, and designed to best measure the knowledge and skills found in the learning goal of this SAO. The assessment should be accompanied by clear criteria or rubrics to describe what students have learned. |
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| **Assessments** **for this SAO** |
| Describe the **assessments** (such as performance tasks and their corresponding rubrics) that measure students’ understanding of the learning goal[[1]](#footnote-1). | Students will respond to a summative math story problem that includes the expectation that the student will identify and demonstrate at least one different strategy for solving the problem. A sample story problem may be: **Prompt:** Examine a set of pictures and write a problem suggested by the picture (<https://illuminations.nctm.org/uploadedFiles/Content/Lessons/Resources/3-5/MathFootball-AS-GetPicture.pdf>). |
| Explain how student performance is defined and scored using the assessments. Include the specific rubric and/or scoring criteria to be used. | Student responses will be scored using a 1-3 point analytic math problem solving rubric created by the grade 2 team and validated by members of the math committee. The criteria to be analyzed include mathematic thinking, strategy/reasoning, and computation. The three levels include 3 – meets the expectation, 2 – partially meets the benchmark, and 1 – does not meet the benchmark. See below:

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| --- | --- | --- | --- |
| **Level** | **Mathematical Thinking** | **Strategy/Reasoning** | **Computation**  |
| **3 - Meets** | * Clear understanding of the problem
* Identifies the important parts of the question
* Answer is labeled with correct units
 | * Appropriate strategy is chosen to solve the entire problem
* Strategy and reasoning is accurate and efficient
 | * Answer is correct
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| **2 – Partially Meets** | * Shows some understanding of the problem
* Partially identifies the important parts of the question
* Answer is not labeled or units are incorrect
 | * Partially correct strategy is chosen that could have solved part of the problem
* Strategy and reasoning would have worked to solve the problem
 | * Answer can be correct but the strategy did not support the answer
* Answer can be correct but evidence of conceptual understanding needs to be more accurate
 |
| **1 –** **Does not Meet** | * Does not understand the problem
* Unable to use prior knowledge to take steps to solve the question
 | * No strategy is evident
* Strategy and reasoning would not work to solve any part of the problem
 | * Answer is incorrect
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*\*See pages 9-10 in the Instructional Guide for Developing Student Achievement Objectives*

**Directions for Establishing Targets:** Use the planning information to guide how you will use previous performance to set baseline data as well as to establish expected targets.

| **Targets:** identify the expected outcomes by the end of the instructional period for the whole class as well as for different subgroups, as appropriate.  |
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| **Actual Performance from Baseline Data** |
| Identify the actual performance (e.g., grades, test scores, etc.) from the collected baseline data used to establish starting points for students and place students into “starting” groups such as high, typical, and low. | Student should demonstrate the ability to meet the grade level expectations and the criteria on the problem solving rubric. Using the baseline data collected at the beginning of the year the following is the starting points for the students:1/22 in the advanced group (meets the benchmark)10/22 in the average group (partially meets the benchmark)11/2 in the low group (does not meet the benchmark) |
| **Expected Targets for this SAO** |
| Using students’ starting points, identify the **number or percentage of students** expected at each achievement level based on their end-of-course assessment performance(s).  | By the end of the year students will be in the following groups:19/22 in the advanced group (meets the benchmark)3/22 in the average group (partially meets the benchmark)0/2 in the low group (does not meet the benchmark) |

**Directions:** Complete this section at the end of the instructional period.

| **Actual Outcomes:** identify the actual outcomes at the end of the instructional period for the whole class as well as for different subgroups, as appropriate. |
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| Record the **actual** number or percentage of students who achieved the targets.  |  |
| Please provide any comments you wish to include about actual outcomes:  |

*\*See pages 11-12 in the Instructional Guide for Developing Student Learning Objectives*

**Directions for Teacher Ratings**: The table below is to be used by the administrator reviewing the SAO to document the teacher rating based on the targets that were established.

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| **Teacher Ratings:** Based on the results of the learning goal, assessments/tasks, and targets of this SAO, a teacher rating is noted below. |
| [ ]  **Does Not Meet**Based on the students’ starting points, students performed worse than expected. | **[ ]  Meets**Based on the students’ starting points, students performed as expected. | [ ]  **Exceeds**Based on the students’ starting points, students performed better than expected. |
| Administrator comments: |
| Date | Administrator Signature |
| Date | Teacher Signature(the signature does not necessarily indicate agreement with the rating) |

*\*See page 13 in the Instructional Guide for Developing Student Learning Objectives*

1. Assessments and rubrics need to be established as high quality, such as through the Assessment Review Tool. [↑](#footnote-ref-1)