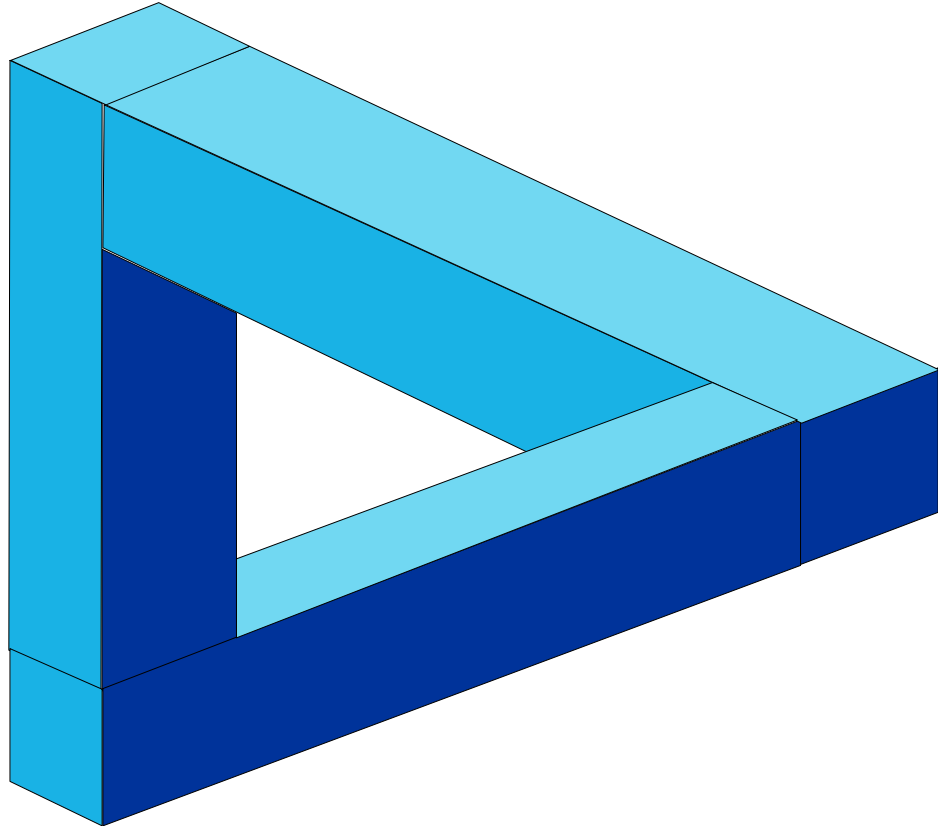


Figure This!



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Getting to the Point of Creating Task Specific Rubrics

The April Mathematics Performance Tasks have been formatted a little differently this month. As in the past, each grade band (K-2, 3-5, & 6-8) has been given a performance task, teacher instructions, benchmark descriptors and papers, standards matrix, and a grade level task specific rubric.

This month however, the rubric has **not** been completed so teachers will have an opportunity to create their own task specific rubric! This will give teachers some experience with creating rubrics and establishing performance levels for students in their own class.

In order to assist teachers in this task, the task specific rubric has been partially completed. Each rubric identifies a key APS Mathematics Standard and a corresponding proficiency (practitioner) level for the performance task at each of the intended grade levels.

To complete the task specific rubric teachers need to:

1. Review the article "Getting to the Point of Establishing Proficiency Levels" in the **March Tip Sheet**.
2. Complete the performance task to get an understanding for the mathematics presented in the task.
3. Write 2 - 3 criteria to establish the performance levels (Novice, Apprentice, & Expert) to identify student Understanding; Strategies, Reasoning and Procedures; and Communication for the grade level they teach.
 - ✓ Criteria will differ from grade level to grade level.
 - ✓ Criteria will differ based on the teacher's intention for using the task.
 - ✓ Teachers are encouraged to review other task specific rubric to get a feel for the differences in each of the performance levels.
4. Teachers may also want to add additional criteria to further identify the Practitioner (proficiency) level or add an additional mathematics standard to support the tasks use in their classroom.
5. Administer the performance task to their class and evaluate their student's performances using their task specific rubric! Revise the rubric as needed.
 - ✓ Feel free to discuss or create the rubric with other teachers (either within the grade or the grade band).

After teachers have completed their task specific rubric and have evaluated the student's work, we at RDA are asking teacher to **VOLUNTARILY** send in the student's work and the rubrics.

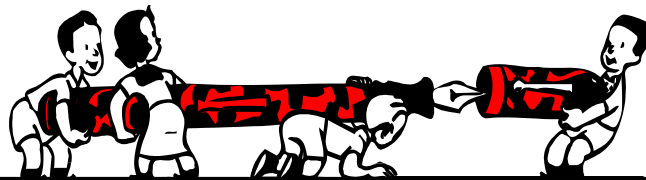
- The student work will not be 'officially' scored and the rubric will not be evaluated or returned to teachers, so please make copies for your personal records.
- We are only asking teachers to send in their rubrics and tasks for the APRIL performance tasks.
- It is our hope to use the information that is sent in to develop future tasks and rubrics based on the information teachers and students give us.
- We would also like to start collecting student work from APS students! Please send the original student work, do not send copies of student work.

Send the following items to RDA:

1. The task specific rubric the teacher created for the April task only!
 2. The student's original work for the performance task. *(You do not have to score the student work for it to be sent in, but it is recommended that teachers score the work to acquaint themselves with the task specific rubric they have created.)*
 3. Any comments about the process of creating the rubric, scoring student work with their rubric, and/or observations made about the mathematics within the task.
- **Items should be received at RDA by June 1, 2001 and can be dropped off or sent via interoffice mail. Remember this is voluntary.**

**Please label the envelope as follows: RDA C/O Christina Fritz
April Tasks and Rubrics**

A Teacher 'All Call'...



It has been a very exciting year in APS for its Mathematics Program. There has been a lot to endure – new benchmarks and standards; new math programs, materials and textbooks; and new assessment tools. It has not been an easy year and teachers have been experiencing these growing pains in their classroom. Our teachers have persevered and they should be congratulated for their efforts. The mathematics that is being taught to our students is vital.

As a way to meet the needs of our teachers in the district, RDA would like to help teachers and schools by developing more math resources. We would like to build a library of assessments, lessons, resources and materials to support the mathematics being taught by our APS teachers for our students. We are asking teachers to send in **teacher developed** assessment tasks and lessons that worked for them.

The tasks should be performance-based assessments and can support any level (K – 12) of the mathematics curriculum. Teachers are encouraged to send in tasks they created or co-created for any of the math programs (*Investigations, Everyday Mathematics, Trailblazers, Harcourt, Saxon, Math in Context, MathThematics, and Glencoe, etc.*).

It is our intent to use these performance tasks to build the **APS Mathematics Task Bank**.

- ❖ The tasks will be distributed to teachers and schools for use in the classroom.
- ❖ Tasks will be edited for print and teachers will receive credit for having created the tasks.
- ❖ This will be an ongoing collection and as teachers develop assessment tools that work in their classroom, we are interested in collecting and organizing the tasks for use by other teachers and schools in the district.
- This is a **voluntary activity for teachers** and is not required. There is no entry deadline.

Here is what you do.

Teachers will be asked to follow the same format as the tasks presented in the **APS Mathematics Task Bank**. Please look through the formats to assist you in your task writing. Please type the task, teacher instructions, and the task specific rubric.

1. Write the student's task on a separate page. Include:

- ✓ The main mathematics strand (Number Sense & Operations, Geometry, etc.) at the bottom of the page.
- ✓ The grade band intended for the task (K – 2, 3 – 5, 6 – 8, or 9 – 12).

2. Write a teacher instruction page. Include and complete the following headings:

- ✓ **The grade level.**
- ✓ **A restatement of the task.**
- ✓ **Context – From the task author:** Place the task in context, how did you use it in your class? What specific grade level was it intended for? What previous work were the students covering?
- ✓ **What the task accomplishes:** What mathematics are you targeting for the students?
- ✓ **What students will do:** What happened in the classroom when students were given the opportunity to solve the task?
- ✓ **Time Required:** How long will it take for students to complete the task?
- ✓ **Interdisciplinary Links:** How can this task be connected to other disciplines?
- ✓ **Teaching Tips:** Is there anything teachers should be aware of before they start the task with their students? Should certain math concepts be taught first?
- ✓ **Suggested Materials:** What materials will students need to complete the task.
- ✓ **Possible Solutions:** Not all performance tasks have a final solution, however list possible solutions or approaches to the problem. If there is a specific answer please include the solution.
- ✓ **Benchmark Descriptors:** Include a description of the benchmarks for the 4 different performance levels: Novice, Apprentice, Practitioner, and Expert. Relate them to the benchmark papers collected.
- ✓ **Benchmark Papers:** Gather a sample of student work for the 4 performance levels: Novice, Apprentice, Practitioner, and Expert. Choose one sample for each level and clearly label the student work.
- ✓ **APS Mathematics Standards:** List all of the APS Mathematics Standards and Benchmarks that the task targets.
- ✓ **Task Specific Rubric:** Create a task specific rubric for the task. Indicate the key (1 – 2) APS Mathematics Standards the task is targeting. Establish a 'Proficiency' (practitioner) level for the task.

3. Include any comments (on a separate page) about the writing process, engaging the students, the math program the task was developed for, and/or any observation about the mathematics in the task.

4. Send the task, teacher instructions, benchmark papers, and the task specific rubric to RDA.

These can be either dropped off or sent via interoffice mail to:
RDA C/O Christina Fritz – Teacher Developed Mathematics Tasks

I am Done When...



Teachers get frustrated when students say, "I'm done" with a task, when they indeed are not. Here are some directions to help students to avoid this false claim.

"How do I know when I am done?"

You are done when:

- ✓ You have made a 'shopping list' (i.e. ruler, calculator, graph paper, etc.) of supplies that you will need to solve the task.
- ✓ You have found a solution to all parts of the problem.
- ✓ You have used as much math language and symbols as you can to communicate your solution to the task.
- ✓ You have attached to your task:
 - a) Your name and the date – on all pieces of your work.
 - b) A number sentence or equation that supports your solution.
 - c) A graph, chart, table, diagram, or model that supports your solution.
 - d) A summary of your final solution.
 - e) All of your scratch work.
 - f) And you have assessed your work using the self-assessment tool below.

Student Self-Assessment Tool (Circle One)

Language of Mathematics

I used: None A Little A Lot

Math Representation

I used a: Graph Chart Table Model Diagram
My Representations: Had No Labels Had Some Labels Had All Labels

"I Noticed..." Statements

I made: None One More Than One

Documentation

I showed: None of My Work Some of My Work All of My Work
I included: No summary A 1 sentence summary A 2 or more sentence summary

❖ Teachers: Feel free to adapt the student self-assessment tool as needed for the individual needs of your class.



Benchmark Papers

RDA would like teachers to send in any benchmark papers they have for any of the tasks represented in the APS Mathematics Task Bank or the Monthly Tasks. We would like to get samples of student work based on the APS Mathematics Standards.

- ✓ Clearly label the performance level (Novice, Apprentice, Practitioner, and Expert) for each paper.
- ✓ Please send in original work.
- ✓ Student work will not be returned, and student names will be deleted from all work.
- ✓ Please submit all benchmark papers by June 1, 2001.

Please Send Benchmark papers via interoffice mail to: RDA c/o Christina Fritz
Label the envelope: Benchmark Papers and the Name of the Task