Got Math?

A Newsletter from the Secondary Mathematics Team

Southern Nevada Regional Professional Development Program

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Teach My Kid - Starting Out Right

Parents expect their child's school to teach them what they will need to know to be prepared for the next level. This is often manifest in results on tests. Parents want teachers to keep them informed of student progress and to help them understand what the student should be able to do in mathematics. Parents also want to know that their child's school will provide opportunities for their "kid" to get involved in activities and have enough good experiences to want to return the next day. Are these reasonable expectations? How can teachers help form the positive partnerships that address these concerns?

In mathematics, the classroom climate that teachers create during the first few days and weeks of school often determines the success for the entire year. Creating an environment where students learn depends on a teacher's ability to create a sense of building success on success. When students are successful, they seem to want to work harder.

Math Resources

www.rpdp.net

In this issue:

Teachers:

- It is important to learn names and establish norms and procedures. Appropriate teacher/student relationship that promotes trust and expectations of a positive learning environment is a key component.
- Communicate expectations and results with parents and students.
- It is important to teach appropriate grade-level content and to help students learn to take good notes.
- Create and give practice assignments and activities that link with the classroom instruction and the tests.
- Help students learn to "speak and write math." These types of questions and expectations help students communicate more effectively with parents about what is happening in class.
    - What did you learn today?
    - Explain how this lesson relates to the concepts we learned last week?
    - Write a summary of today's lesson.

Parents:

- The at-home activities that appear to make the most significant difference include the following:
    - Set up an appropriate place for study/homework.
    - Help students organize their time, and monitor their use of time.
    - Expect effective notes.
    - Help with homework.
    - Discuss school matters regarding the class instruction, activities, assignments, and tests.
    - Communicate with the teacher.

Students:

- Participate daily and be actively engaged in the learning process.
- Take notes, do homework, and prepare for assessments.

Tips for Success in Mathematics - Starting Out Right

Success in mathematics is often measured by results on tests. The following tips for students, parents, and teachers summarize questions, suggestions, and guides to overall achievement in the course and improving test scores. Parents and students should frequently discuss school matters regarding the class instruction, activities, assignments, and tests.

Question	Student/Parent Tips	Teacher Tips
What should be learned?	What is the intention of the lesson, what specific skills will need to be exhibited, what types of problems will I be able to solve, how will I know if I am progressing satisfactorily?	Define learning targets (standards, concepts, skills, achievement goals, etc.) before instruction begins. Make objectives and skills evident to students and check for understanding before the test.
How do things connect?	The more you understand, the less you have to memorize. If you understand why a formula works or how it was derived, it will be easier to remember.	Link new concepts to prior knowledge and help students develop and understand the connections.
Will notes and assignments be useful?	Get any missed notes or assignments that may have been missed. Make up all homework assignments.	Teach note-taking skills and make notes and assignments readily available for absent students. Practice reviewing with students using their notes.
What is a good way to practice?	Redo homework and quiz problems. Try different examples to prepare for the test. Practice making variations of the questions on the practice test.	Practice skills of variation – how problems can be different. Explain how problems can vary from the "simple, normal" procedures/rules. Ask the question, "How can we make the problem different?"
When is the best time to review?	Start reviewing early. Don't wait until the night before a test to study. Study a little each day. Do all homework, and redo some of the difficult problems.	Practice the review process by using the practice test throughout the unit. Check for student understanding daily. Drill facts and procedures using Long Term Memory Review strategies.
What are some tips for avoiding silly mistakes? (Common errors)	Take good notes when the teacher goes over common errors that students make, and then practice identifying them as you study and complete homework.	Identify common pitfalls for various math problems. During instruction, practice procedures and specifically show and have students write in their notes where common errors occur. Have students do error analysis to identify the patterns of errors or mistakes that students make in their work.
What will be on the test?	Ask the teacher for specifics, topics, and content.	Prepare a practice test for students.
What will the test questions be like?	Will there be short answer, computation, word problems, graphs, multiple-choice, true/false, proofs, vocabulary?	Prepare a practice test for students. Practice the types of questions on the practice test as well as the types of questions on the homework.