

My Math Profile

Dear Teacher:

The following questionnaire has been provided as a student-specific teaching tool. You may download and print out copies to give to your students to fill out individually, with your help, or the help of parents. The questionnaire allows each student to assess their challenges with math as well as how math relates to their personal goals. In addition, the profile can be updated at mid-year, allowing you and the student to see how personal math challenges are being met. In addition to the math profile, there pages with tips for improved improving math study habits as well as tips for preparing for and taking exams. Encourage students to be honest with their answers so that you have the best information about each child's approach to mathematics.

DeeGee Lester, Education Director

Dear Student:

Please show this personal math profile to your math teacher when you return to class in the fall. The profile will help your teacher to see your personal goals, how you see math relating to those goals, and what you see as special problems you have with math. Attached to this sheet you will find some suggestions to help you develop better study habits and to aid you in problem solving, preparing for tests and taking tests. Good luck and have fun with math!

DeeGee Lester, Education Director The Parthenon

Personal Math Profile

(Please fill out the Math Profile and give it to your math teacher).

Name:_____

School: _____ Grade: _____

Goal Setting:

1. What are my goals in life? (What careers are you now considering? What sorts of activities - sports, art, music, computer games, etc. – interest you? Where do you want to go to college).

2. How will a better knowledge of math help me to reach my goals?

3. How will my future be hindered by poor math skills?

Self Assessment:

4. Why have I believed I could not do well in math? (For example, does your dislike of math cause you to spend less time studying? Did you change schools and find yourself behind in the curriculum? Did someone tell you that you could not do math? Do relatives remind you "No one in our family was ever good at math")?

5. *I have the most difficulty in math with:* (examples of answers might include work problems, fractions, learning rules and formulas, etc.)

6. Below are listed some things I like to do now that are similar to math (puzzles, solving riddles, determining angles for shots on a pool table, etc.) or that use math techniques such as completing things in a sequence of steps (making models, overcoming challenges in a computer game, sewing a garment or cooking with a recipe, making pottery, etc.).

7. *My personal math goal for this year is:* (Some suggestions include strengthening my study habits, raising my grade to the next level, discovering ways to make math more exciting to me).



Developing Math Skills

Math Study Skills:

- 1. Remember, you are responsible for what you do or don't do listening in class, asking questions about things you don't understand, completing homework assignments, and preparing for tests.
- 2. Observe problem examples in class. Many times similar problems (with only the numbers changed) show up on exams.
- **3.** *Review and get ahead.* At the end of your homework assignment, work a problem from the previous assignment (especially a problem that may have been difficult) and then get ahead by looking at the material you will be covering in the next section and try to work one of those problems. You may or may not figure out the answer, but wouldn't it be exciting if the teacher put a new problem on the board and you knew how to solve it? What a confidence builder!!!
- 4. Ask questions! Ask questions! Ask questions! Don't ask, "How do we work problem number 5?" *Instead, ask* "How do we set up problem number 5?" *or* "My answer for problem number 5 is not the same as the answer in the book, what am I doing wrong?"
- 5. *Try again.* When the teacher has answered your question and you have successfully completed the problem, try to work another similar problem.
- 6. Those pesky questions. If you are too embarrassed to ask questions in class or if you have too many questions, request a meeting with the teacher after class.

- 7. Get help early. Remember that in math each day builds upon the material from the day before. It is important to keep up and to ask questions as soon as you start to become confused. The day before the test is too late.
- 8. Familiarize yourself with help sources. Your teacher is your best resource, but there are others: a) Nashville's Homework Hotline can be reached at 360-9355; b) ask your teacher if several students can form a math study group (this can be especially helpful if the number of students in each group is small, with 5-6 people, includes at least two students who are capable of helping their study-mates, and if the group sessions are focused on math and do not break down into other discussions); c) if problems persist or if you are falling behind in class, ask your teacher to recommend a math tutor.
- 9. Find ways to learn key concepts. Make a colorful chart and add key concepts (such as the Pythagorean Theorem, finding the common denominator, etc). Make up a song or rap to learn concepts. Find a method that works for you.
- 10. Check with your teacher about problem-solving strategies. In a video game a hero on a quest confronts different problems and must often use a different strategy with each challenge. The same often applies to math problems. See if any of the following strategies make the problem solving easier: a) make a diagram, picture or table, especially with word problems; b) look for patterns; c) work backward from the answer; d) recall a formula or concepts from the color charts or rap songs you created in #9); e) try a simpler version of the problem.

Preparing For Math Exams:

- 1. Keep up in class and homework assignments. Ask questions and get help early. Do not wait until a day or two before the test to play "catch-up."
- 2. *Review homework assignments.* Place your homework in categories. If there is a section that is difficult for you, spend more time reviewing that section.
- *3. Review formulas. Review what formulas apply to particular kinds of problems. If you composed songs, raps, or made charts earlier, review those.*
- 4. Work problems again. Look through each section and find and rework sample problems or review problems from each section.
- 5. "Six Days and Rest" rule. Begin studying for the test a week before the exam. Study a while each day. If questions arise, go over those with your teacher the next day. If you have formed a study group, get together at least once during the week to go over material and to time yourselves on several questions. On the evening before the exam, have a quick review and rest for mental alertness.

Taking a Math Exam:

- 1. Look over the entire exam. Determine the number of problems you have and your time limit for the test in order to know the average time you have for each problem. Read each problem carefully.
- 2. Move from easy to hard problems. After looking over the test, solve those problems that are easy for you first. Then work your way to the hardest

problems. This will assure that you use your time wisely and complete the most problems in the time allotted.

- **3.** Work quickly. If you are taking an hour-long test and have ten problems, you will average six minutes per question. If you get stuck on a problem move to another and return later. By finishing the easiest problems first you may have some extra time for the more difficult problems.
- 4. Erasing wastes time. Unless your teacher instructs you to be neat, avoid erasing. Cross out your work and start over.
- 5. Show all your work. Your teacher wants to be able to see how you came up with your answer. If your answer is wrong, the teacher can show where you messed up and might give you partial credit for the steps that were correct.

The Parthenon staff hopes these guidelines will help you to improve your math skills.

DeeGee Lester, Education Director