

Tips for Maps, Graphs & Charts Contest Preparation

Prepare for a test of basic skills, not one of general knowledge. This is a basic skills contest that tests students' abilities to interpret and analyze graphic information. As such, it addresses TEKS objectives in social studies, science, language arts, social studies, and math. Although participation in the atlas portion of the contest will improve students' knowledge of geography, it is a test of research skills rather than of knowledge of a body of geographic facts. Students need to spend their preparation time for this portion of the contest learning how to use the atlas quickly and effectively.

Identify skills that will be tested. Use the *A+ Handbook* samples and study tests to become familiar with the range of skills to be tested. Doing so lets you plan manageable, short practice sessions, and choose existing classroom materials to help develop those skills. Tables and graphs in students' textbooks, newspapers, and magazines, for example, are good practice sources to help students understand titles, legends and notes; to quickly locate specific information, and to estimate and approximate distances in maps or data points in graphs and charts. Or have students make up questions from the maps and graphs they prepare for class assignments. These sources may not, however, provide adequate practice for more complicated interpretation and comparison skills tested in the contest, because they are designed to illustrate specific points and won't have the variety or the patterns needed within each graph.

Develop general test-taking strategies. This is a timed skill test that includes a lot of information, so it helps to play to each student's strength. Some students find it easy to read and interpret pie charts, but have more difficulty with bar graphs. Some are quicker with maps, some with graphs or tables. Unlike number sense, MG&C is not a sequenced test. Each student can start wherever within the test they can work most quickly, and then move on to more difficult sections. Within each section, taking a minute to study the title, legend and notes before diving into questions will save time in the long run. Students need to learn how to read a question quickly and to identify the information needed to answer it. Underlining main concepts in practice tests can help them learn to focus quickly. Questions are not necessarily arranged in order of difficulty. Students can, within reason, skip hard questions and come back to them if there is time remaining. Guessing is not a good strategy, because this contest penalizes students for incorrect answers.

Work out some test-taking shortcuts. In a timed test with lots of questions, finding shortcuts that help students answer certain types of questions more quickly can significantly raise test scores. Show students, for example, how to draw a line across bar graphs or line graphs to find data points nearest in value to each other. Use a ruler (or a paper scale) to measure distances on maps or differences between values on graphs. If students use clear or transparent rulers, none of the data is covered up by the measuring tool. Comparing numbers in graphs (e.g., of numbers of visitors or of boats sold) often means looking at shapes, not calculating numbers. Finding the answers to trend questions also requires students to look at shapes, not to locate specific graph positions and then calculate numbers. When asked questions about how many of a particular feature (e.g., state roads, cabins, bus stops) can be found on a map, students may find it helpful to make a mark across each feature as they count it. Or they may use a colored pen to mark an actual route to answer questions about the shortest or most direct routes. Students should feel free to mark all over the test if doing so helps them answer questions more quickly. Just be sure they remember to record their answers in the blanks provided on the test.

Learn how the atlas is organized, and how and where information is presented. To find information quickly in the atlas section of the test, students must know where to look. Students need to be thoroughly familiar with the types of information presented and the symbols used throughout the atlas. There will be test questions drawn from special sections like the Country Tables and the World Facts tables on the inside front cover. Try giving students a list of simple questions (e.g., What is the capital city of South Korea?, How high is Mount Everest?, What is the natural population growth rate in New Zealand?), and have them list all of the atlas pages where each answer can be found. They may find it helpful to tab certain sections and pages, like the Table of Contents, Page 7, index, and Country Tables.

Practice, practice, practice. Start small – a 75-question practice test can be very intimidating to the uninitiated. If at all possible, though, also have students work up to full-length practice tests, so that everything looks and feels familiar on contest day.