

6th Annual StRUT Competition, 2006
Judge Guide for Computer Build/Presentation

This judge's guide is a procedural tool to ensure uniformity. The judge training session in the morning of the competition will explain changes that have occurred since the printing of this document.

Each judging team is composed of two people, one from industry and one from education. Each person will be given a rubric (the answer sheet) that will be used to judge the competition. The scoring rubric is to be filled out by each judge with **one consensus score** tabulated and turned into the scoring office.

Introduction by judges to students (Give purpose and objectives):

Judges are to set the stage for the student teams and then observe and record their solutions. We ask that judges not answer questions or offer suggestions regarding the disassembly and assembly process. If the students are at a stand-still and can not continue, the judges may offer assistance to keep the team on track, but note the assistance and grade accordingly. (Exception: more help will be offered to Elementary students if needed.)

There will be roaming technical consultants to assist the judges. If there are parts that need to be replaced or technical assistance call a roaming technician.

Step 1 (The approach):

When the student team approaches the computer to start the build competition they should find the computer assembled and in working order with all the necessary cables, keyboard, mouse and monitor properly attached.

Step 2 (System Verification):

When the judges are ready, instruct the student team captain to **press** the power switch to verify that the computer is functioning correctly. If it is not functioning correctly, call a roaming technician for a replacement system. After verification that the system works properly, they will then **properly shut down** the computer to begin the exercise.

Step 3 (Ready for timing): START TIME

The student team captain will inform the judges when they are ready to begin the disassembly. The **time should begin** when the students inform the judges.

Safety point... the **power must be turned off** and the **power cord unplugged from the computer** before disassembly of the computer begins.

Step 4 (Disassembly stage):

The disassembly stage is complete when all the parts are removed from the chassis as shown in the picture to the right, the **student team captain announces** that it is disassembled and the judge has verified that everything is correctly disassembled.



Step 5 (Assembly stage):

After the judges have verified that all the parts have been correctly disassembled, the students will be allowed to start the assembly of the computer.

Step 6 (Assembly completion): STOP TIME

The time will stop when the computer has booted up and the judges see the Windows 2000 logon screen similar to the one shown below.



Step 7 (Computer Diagnostics):

Judges will request the students to provide the following information from the computer: (1) Processor Type and Processor Speed, (2) Amount of RAM, and (3) Hard Drive capacity. Students will retrieve results from properties window of “My Computer” and “Drive C” icons.

Step 8 (Build score tabulation):

Each judge will record the time, tabulate their build and diagnostic scores using the rubric, and then average their scores on the “Master Computer Build Rubric” sheet and give to the Build Director (POC.)

(The students should be preparing their presentation while the judges are tabulating the scores)

Step 9 (The presentation):

Judges should then notify the students how much time is left before they must finish their presentation. This will be announced when 20, 10 and remain. The students will then determine when they are ready to present and notify the judges.

(Exception: more help will be offered to Elementary students if needed.)

Judges will use the presentation rubric to evaluate the team presentation, consolidate their score on the “Master Computer Presentation Rubric” sheet and give to the Build Director (POC.) Have the students turn off the computer and leave it as they found it. (With all components attached and plugged in)

Do not forget to mark the team identification number on all scoring documents

After the scoring is turned in, take the opportunity (if time permits) to discuss the exercise with the students. They will appreciate the advice and it is a prime time to learn.

