2019-20 ELEMENTARY SCHOOL STEM FAIR
COMPUTER DESIGN JUDGING SHEET

Name(s) _____

_____
Judge Number

_____

School _____

Project Title _____ **#_____**

Journal/Log	Please Write Comments	Score
Title Page Title, name, school, date.		**/4**
Table of Contents All steps of the computer design process listed: Need, Research, Design Requirements, Design and Methodology, Programing and Testing, and Reflections and Conclusions.		**/6**

Computer Design Process
     Define a Need
     A practical need or a problem to be solved is clearly defined.
		/3

Research Well-written research notes, in their own words, comprehensive, and contributes to field of study.		**/10**
At least three cited references.		**/3**
Design Requirements Explanation of the criteria for the proposed solution (what you want the program to do).		**/4**
Explanation of the constraints (the limitations of the program).		**/4**
Design Plan and Methodology Exploration of alternative codes shown to answer the need.		**/6**
Shows beginning and progressive coding designs.		**/5**
Identification of a solution with a final development of a written code to program to meet the criteria and constraints.		**/5**
Data gathering plan is well designed, systematic, and organized.		**/5**
Programing and Testing of the Code After programing, first testing of the code shows sufficient data gathered with written analysis.		**/5**
Follow up redesigning by testing the program in multiple conditions with sufficient data gathering with written analysis.		**/5**
Surveys were administered to others to collect data and analyzed.		**/5**
Program demonstrates coding skills and completeness showing the criteria and constraints of the program.		**/5**
Reflection Student writing describes a detailed account of the process involved in creating the program.		**/5**
Shows strong, reasonable conclusions.		**/5**
Shows strong applications to real world ideas.		**/5**
Student learning is evident in the writing.		**/5**
Overall Journal Presentation Neat, organized, easy to follow, and complete.		**/5**
Make sure you look at each point value before you score it.	**Side One Total**	**/100**

2019-20 ELEMENTARY SCHOOL STEM FAIR
COMPUTER DESIGN JUDGING SHEET
(Continued)

#_____

Score	Display, Interview, and Project Design	Please Write Comments
/5	**The Display** Computer Design Processes is neat, edited, and physically sound.	
/10	Computer Design Process displayed: Need, Research, Design Requirements, Design and Methodology, Programing and Testing, and Reflections and Conclusions. **Research need not be on the board.**	
/10	Computer design process shows clarity of words, graphics, legends, is self-explanatory and flows in a logical order. **Supportive documentation cited on the board.**	
/5	Board design demonstrates exceptional and significant thought out creativity.	
/10	**Interview** Student shows a basic knowledge of field studied closely relevant to the project.	
/10	Student is able to clearly explain the Computer Design Process with the results of the project and its potential impact on computer programing.	
/10	Student gives thoughtful responses to questions and understands the interpretation and limitations of the results.	
/5	Student shows interest, enthusiasm, and a passion toward the project and has quality ideas for further research.	
/10	**Project Design Follow Through** Significant innovative, creative and procedural approach with ingenious use of materials and equipment to solve the practical need equal to at least a 5th/6th grade level thinking.	
/10	Project shows exceptionally strong in-depth thought and work to design and program a computer with excellent follow through to solve the need.	
/5	Student shows a large degree of independence in developing and conducting the project.	
/10	Student shows recognition of potential implications in computer science and society, demonstrating strong, interpretive conclusions with useful connections to the real world.	
/100 Side 2 Total	**Each line has different point values. Please make sure you look at each point value before you give a score.**	
/100 Side 1 Total		
/200 Total Score		