SARSEF SCIENCE
Judging Guidelines for Pre K - Kindergarten

The following evaluation criteria will be used for judging at SARSEF. This may assist you in evaluating each of these categories, however, the points are provided as guidelines only. Each section includes key items to consider.

I. Research Question (15 pts.)

___ question is something that this child or group of children genuinely might want to know
___ gives a reason for why this child (or children) wants to do the project
___ is authentic to this age level
___ question is asked clearly and is something that might be possible for a child to answer with assistance
___ question is narrowed down in scope (specific, not too broad or too many other parts)

II. Design and Methodology (25 pts.)

___ evidence that the child/children thought of what needs to happen in sequence/order ("First, I will..." "Then I will…")
___ plan for how the child can collect data – i.e. place to make tally marks, drawing pictures along the way
___ appropriate # of subjects i.e. plans to watch more than one anthill, measure speed of 2-3 toy cars
___ plans adequate # of trials i.e. sends each car down ramp several times, watches ants in morning and afternoon
___ cares about safety of others, nature, self

III. Execution: Data Collection, Analysis and Interpretation (25 pts.) NOTE: adult help is allowed but somewhere in the project there should be evidence that it some or most of it was done by or with the child.

___ followed same idea each time - not too much variation i.e. does not change mind each time
___ uses basic touch counting strategies up to ten "1, 2, 3…"
___ makes a comparison, conclusion – using words like "More" or "Less" and "Bigger" or "Smaller"
___ evidence that each child had their "hands-on" most parts of the project
___ says what the answer to their question was (more points if based on their collected data)
___ recognizes the meaning of what was found - mentions why they did the project in the first place
___ when asked, can say what they **wish** they could do next time or if there were no limits (i.e. money, time)

IV. Creativity (20 pts.)

A creative project demonstrates imagination and inventiveness. Such projects are ones that the student personally cares about, have not been frequently listed in Science Fair idea books or web.

___ project demonstrates particular creativity for a young child in one or more Criteria I, II, III or V
___ idea appears novel - at least to this child
___ idea appears to be what student genuinely cares about as evidenced by reason given for doing project
___ there is passion the project: reason, discussion of the plan, or end results

V. Poster Board (15 pts.)

___ evidence the child experienced a science-related concept or skill and enjoyed the process
___ evidence that a child did part of this project on their own
___ evidence of the basic scientific process (question, test, results, conclusion)
___ colorful, creative and logical organization of display (drawings only are fine, expected)
___ hand drawn illustration of some part of the process, graph made out of Legos, M&M's, etc.

SARSEF ENGINEERING Design
Judging Guidelines Pre K – Kindergarten

The following evaluation criteria will be used for judging at SARSEF. This may assist you in evaluating each of these categories, however, the points are provided as guidelines only. Each section includes key items to consider.

I. Research Problem (15 pts.)

___ problem is something that this child or group of children genuinely might want to solve
___ gives a reason for why this child (or children) wants to solve this problem
___ problem is authentic to this age level
___ problem is actually something that might be possible for a child at this level to solve with assistance
___ problem is narrowed down in scope (specific, not too broad or too many other parts)

II. Design and Methodology (25 pts.)

___ identifies a possible solution after observing/studying the problem
___ comes up with an idea (drawing or note about their plan)
___ develops a prototype/model that is different from what exists already
___ evidence that the child thought of what needs to happen in sequence ("First, I will..." "Then I will…")
___ plans at least one model variation, retrial
___ plans for how to collect data – i.e. chart for tally marks, simple journal for drawings
___ appropriate # of subjects i.e. plans to measure if 2-3 different tire sizes changes speed of toy car
___ plans adequate # of trials i.e. tries different tire sizes several times

III. Execution: Construction and Testing (25 pts.)

___ prototype/model follows plan each time without too much variation, tried to "stick to the plan"
___ evidence that each child had their "hands-on" most parts of the project, follows safety rules
___ uses basic touch counting strategies up to ten "1, 2, 3…"
___ makes a comparison, conclusion – using words like "More" or "Less" and "Bigger" or "Smaller"
___ shows changes made based on results
___ says what the best solution to their problem was (more points for if based on their collected data)
___ recognizes the meaning of what was found - mentions why they did the project in the first place
___ when asked, can say what they **wish** they could do next time

IV. Creativity (20 pts.)

A creative project demonstrates imagination and inventiveness. Such projects are ones that the student personally cares about, have not been frequently listed in Science Fair idea books or web.
___ project demonstrates particular creativity for a young child in one or more Criteria I, II, III or V
___ idea appears novel - at least to this child
___ idea appears to be what student genuinely cares about as evidenced by reason given for doing project
___ there is passion about the project: reason, discussion of the plan, or end results

V. Poster Board (15 pts.)

___ evidence the child experienced an engineering-related concept or skill and enjoyed the process
___ evidence that a child did part of this project on their own
___ evidence of the basic engineering design process was followed (research, design, execution)
___ colorful, creative and logical organization of display (drawings only are fine, expected)
___ hand drawn illustration of some part of the solution, graph made out of Legos, M&M's, etc.