

SDIRC Science and STEM Project Guidelines 2021-2022

ELEMENTARY SCHOOLS

A. Grades K-2:

The expectations for Grades K-2 are students work collectively with the help of a directing teacher to produce a class project for display.

B. Grades 3 - 5:

The expectations for Grades 3 – 5 are students will work as a small group/partners, must contribute equally to complete a scientific investigation/design process, and create a visual (trifold board, digital board, poster board, etc). Teachers and parents can serve as advisors in paper research and writing, as well as in correction of spelling and grammatical errors.

- Students have the option to complete an individual project in Grades K-5; however, each student will be participating in team/group/class projects as part of their science curriculum throughout the semester.

Each school is allocated the following number of Science/STEM Projects:	
Grades K-2:	1 class project per grade
Grade 3:	4 total projects - at least 2 must be a teacher led group or class project
Grade 4:	6 total projects – at least 2 must be a teacher led group or class project
Grade 5:	6 total projects – at least 2 must be a teacher led group or class project

- **Minimum of two teacher led group projects** will move on to the Regional Fair for grade levels 3-5.
- There is one judging sheet that displays the criteria for each type of project- Scientific Process Projects and Design Process Projects (STEM based). Please be sure to review these prior to beginning your projects.

Your projects should align with the grade level curriculum maps and standards taught throughout the allotted time frames. This should not take any additional time away from your regular instruction. Be creative – embed the informational text into your ELA instructional routines and complete the investigations during your Science instructional routines.

- Students entering a small group project must select a minimum of ONE but no more than TWO members, to be present for judges’ interviews during the time specified by the Fair Directors.
- Students entering individual projects in grades 3-5 must be present for judges’ interviews during the time specified by the Fair Directors. If a student is not present the project will not be judged.
- Each school is expected to have a school-based fair. All students are encouraged to participate in the school STEM/Science Fair. As an option for students, show boards can be digital through our core science curriculum- DE Board Builder or Studio (If the project moves on to the district fair it would just need to be transferred to the required showboard)
- ESE Teachers and Resource Rooms can do class/group STEM projects.

Ideas and Suggestions:

- Students research during center rotation in the ELA block and perform the design process or investigation during your school wide STEM Days. Students can complete the boards in centers throughout the following weeks.
- 21st Century Afterschool Clubs and/or Morning STEM Clubs would be a good time to allow students to research for their projects, work on the group board/displays.
- Involve your special areas – Media: students can complete research, type, create boards, type; ART: students can design and construct their boards; Technology Time – type, create digital board, research



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MIDDLE SCHOOLS

- **Students in science classes are expected to participate in STEM/Science based investigations as part of their class instruction.** Teachers should use their curriculum they are teaching to incorporate ideas for projects and insure the understanding of the process through their instruction by modeling.
- The STEM/Science Investigations can start and finish during the school day or students can be asked to work on them as part of an at home assignment.
- There is one judging sheet that displays the criteria for each type of project- Scientific Process Projects and Design Process Projects (STEM based). Please be sure to review these prior to beginning your projects.
- **Assignments should not be due for take home projects until adequate instruction has occurred in the classroom to support successful completion of the assignment/task.** (Examples would be: finding a topic, how to research, types of scientific investigations, variables, etc.)
- As an option for students, show boards can be digital through our core science curriculum- DE Board Builder. (If the project moves on to the district fair it would just need to be transferred to the required showboard)
- Be mindful when assessing/grading student projects. These projects should be a positive experience for our students and promote an interest in science! 😊
- Investigations may be group or individual. All investigations should be part of the school fair.
- All students should be encouraged to participate in the school STEM/Science fair. Each middle school will conduct a school STEM/Science fair before the Regional Science Fair. Each school has at least one person that will serve as the fair coordinator.
- The rules and guidelines for the school fair model the Regional Science Fair Rules which models the INTEL International Science and Engineering Fair. The guidelines for the Indian River Regional Science Fair are found on the Education Foundation of Indian River County website.
- Ideas and suggestions:
 - Individual/Group Projects can be completed with assistance during clubs or activities before and after school.
 - ESE Teachers and Resource Rooms can do class/group STEM/Science projects.



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HIGH SCHOOLS

- Students in 9th grade classes are expected to do STEM or science projects as part of class instruction.
- All science teachers will encourage their students to participate in the Regional Science Fair.
- Teachers should use their curriculum they are teaching to incorporate ideas for projects.
- The STEM/Science Project can start and finish during the school day or students can be asked to work on them as part of an at home assignment. Projects may be group or individual.
- There is one judging sheet that displays the criteria for each type of project- Scientific Process Projects and Design Process Projects (STEM based). Please be sure to review these prior to beginning your projects.
- High School science fair coordinators will try to recruit students to participate in the Regional Science Fair.
- The secondary science specialist will brainstorm with the coordinators to come up with a plan to increase involvement.