

Planning a Science Odyssey Project

Congratulations for wanting to participate in Science Odyssey, LVJUSD's science and engineering fair. By participating in Science Odyssey, you distinguish yourself as a student who likes to challenge themselves. Good for you!

Please register online for Science Odyssey before January 18, 2019.

Students in grades 1 – 5 may register at: <https://goo.gl/forms/Oc0WWBhQPtFvmknL2>

Students in grades 6 – 12 may register at: <https://goo.gl/forms/GbZxms1XWT0WACC73>

Use this sheet to help guide your project progress. When you have questions, check in with a science teacher or contact Regina Brinker, teacher on special assignment supporting science and engineering programs, at rbrinker@lvjUSD.org.

Choosing a Project Topic

- Topic is something I am interested in.
- Topic is something that I want to learn more about.
- I have enough time to do this project.
- I have the materials for the project, or could borrow them from school.
- The project does not use fire, weapons, hazardous materials, or controlled substances.
- I can be safe when doing this project.
- I have or will borrow safety glasses and gloves, if needed.

Using a project notebook*

Scientists and engineers use a notebook to keep track of their ideas and progress. You should also keep a notebook for your Science Odyssey project. Judges will read your notebook to get an idea of your thinking and progress throughout your work.

- Use of notebook started as I brainstormed ideas for a project.
- Each entry has a date.
- Entries include my background research, questions, procedures, test results, observations, challenges and solutions, unexpected results, sketches, measurements.
- My name and the name of my school are on the notebook.

*A project notebook is not required for computer science entries (Grades 5 – 12).

Project Procedures

1. What question are you trying to answer with your project? A **testable question** means that you are asking about something that can be measured precisely, and that the test may be repeated several times.

Rather than asking, *Which plant will grow better*, be more specific. Are you measuring plant height, number of leaves, color of leaves, number of flowers? A stronger question is *Do seedlings grow taller if music is played?*

- My question does not say *Which is better...* or *Which do people like...* These are opinions.
- My question tells what is being measured.
- My test is repeated at least three times, or multiple subjects are used for one test.
- A control is used for testing, when indicated. If the test data are collected from a survey, a control group might not be needed. If you are not sure if a control is needed, please check with your teacher.

2. Data is collected during testing

- Something is measured for my project. Examples include time, distance, mass, temperature, number of responses or results.
- A unit of measurement is included for my data. Examples include mm, cm, or meters for distance; Degrees Celsius for temperature; Seconds, minutes, hours, days, or weeks, for time.
- Metric units are used for distance, mass, or temperature.

3. Results are reported

- Data is shown in a data table. Data table has a title and units of measurement.
- Data is shown in a graph. Graph has a title and units of measurement.
- A written description of the results is given.
- All writing is in the student's own words.

What to Include on the Project Board

- Title
- Background research section. You may give facts about the topic and explain technical terms used in your work.
- Hypothesis
- Materials list
- Procedures: This may be a bullet list or chart that shows the steps you took to complete the project. Someone should be able to read the procedures and repeat your test.
- Photos, diagrams, drawings related to your project
- Data table of test results
- Graph of test results
- Written explanation of test results. Writing should be in the student's own words.
- Conclusion: Was the hypothesis correct or not?
- Project abstract for students in grades 6 – 12
- Optional photographs or illustrations
- Optional QR code link to a video recording about the project

- My first and last names are on the back of the project board.
- My partner's full names are on the back of the project board.
- My school's name is on the back of the project board.

- My science notebook will be displayed with my project.
- I understand that I may not leave any materials with my project, other than the science notebook.

****This check list should NOT be included on your project board.**