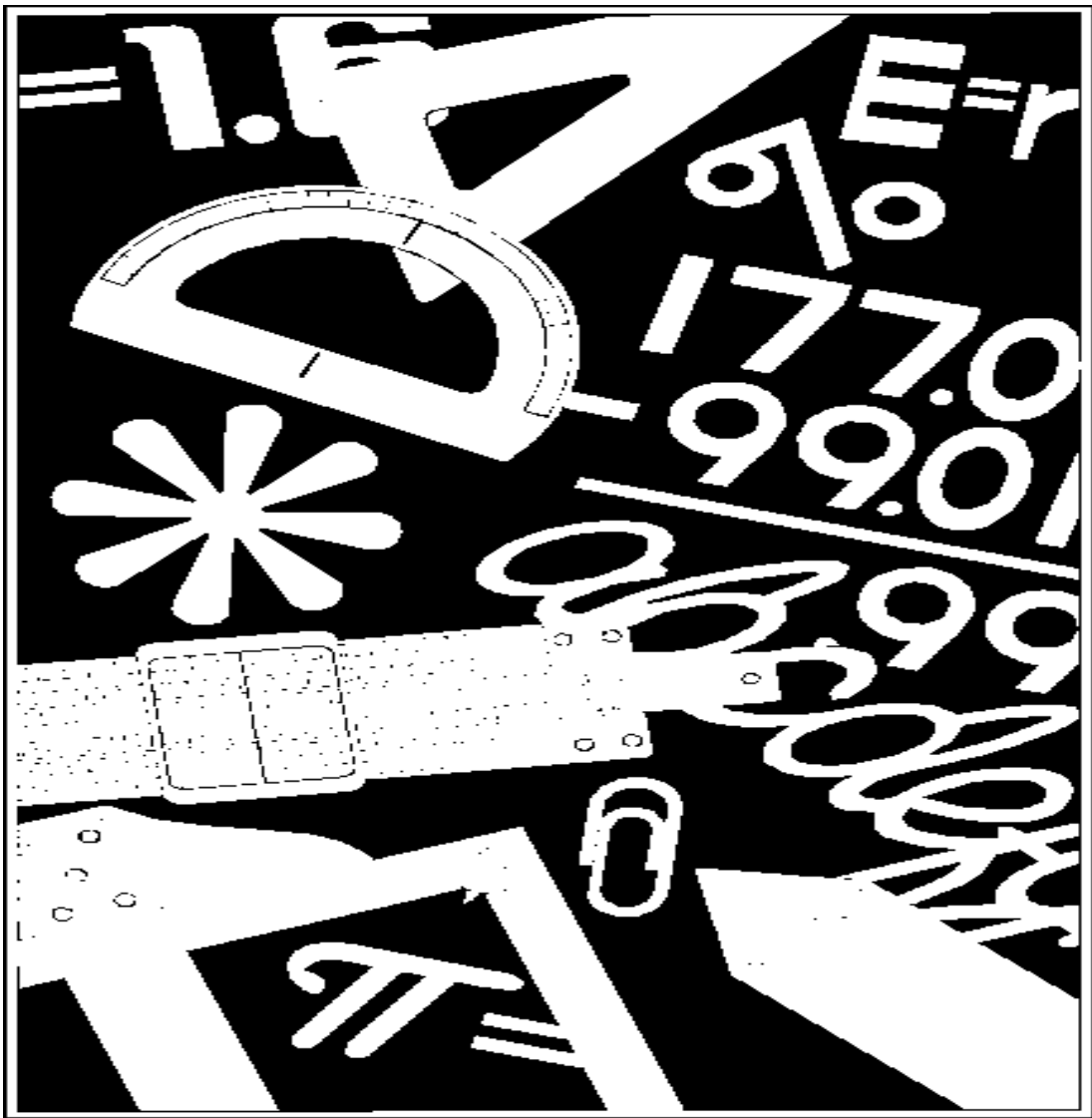


MATH



HELPFUL HINTS

SUGGESTED MATH FAIR PROCEDURES

A math project is a great learning experience for all students. Students integrate many of their skills together such as reading, writing, speaking, mathematics, research and critical thinking.

STEP 1 - Select a problem

Choose a topic that interests you and stick with it.

- Do you have a specific topic of interest? What comes into your mind if you are asked to create a question beginning with How? or What?
- Do you have an area of interest? Research this area and think of a smaller topic. eg: How are geometric solids used in packaging?
- Think of a problem in our society and try to solve it.
- Collect some data and make a graph eg: birthdays at École Bannatyne

Ideas for math projects:

- Patterns in a hundred chart
- Tessellations
- Operations and keys on a calculator
- Surveys and graphs
- Different ways of representing data
- Probability
- Prisms and pyramids
- Polygons
- Symmetry
- Measurement (time, volume, area, distance, temperature)
- Money

STEP 2 - Start a journal or logbook -- You will get marks for this!

- Record information from books, magazines, interviews, computer or television in the journal. Record the source.
- Maintain detailed records of your experiments including dates, observations, and what you do to the project.
- Maintain tables or charts in your logbook. Keep any surveys.

STEP 3 - Plan your project

- Start your project in enough time to allow yourself time to complete all aspects of it.
- Set up a time line:
 - 1) Hand- in registration form and discuss plans with your teacher
 - 2) Have all research materials and information for the project ready for use
 - 3) Have all of your research and experiments completed
 - 4) Prepare the backboard
 - 5) Have your presentation ready and be ready to answer questions

STEP 4 - Do the survey or research

- Look for information in your school and public library; contact places for information; set up an interview with a knowledgeable person. Keep all your notes in your logbook.
- Experiment to find possible solutions to your problem. Make notes, charts, and graphs in your log book about the experiment. Repeat the experiments to make sure your results are accurate!

STEP 5 - Set up the project

Write the report

It is recommended that the report and project background be typed. The written report should include:

- title page, table of contents, research question, written information, diagrams, pictures, graphs, charts, tables, glossary (scientific terms used in project), and bibliography

Report your findings

Backboards should contain the following headings and information (if applicable):

- Question (Problème) -- What are you trying to find out?
- Prediction (Prédiction) -- What do you think will happen?
- Materials (Matériaux) -- List the materials you used
- Procedure (Méthode) -- List the steps you used to solve your problem
- Observations (Observation) -- What did you find out or learn from your experiments?
- Conclusions: (Conclusion) -- Why is this information useful?
- Applications: (Application) -- Why is this information useful?
- Acknowledgements (Remerciements) -- List any help you received
- Bibliography -- (Bibliographie) -- List any materials, books or information you used

STEP 6 - Plan your exhibit

- Remember your backboard is not your project -- it is only the means by which you will tell everyone what you have done
- Build your backboard to the specifications. Be sure to include all of the important information in your display.
- Don't forget to include your logbook, models, display items and other materials.
- **The backboard should not exceed the dimensions of: 1m high, by 2m wide by 1m deep!**