

# **SUGGESTED MATH PROJECT 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.  
ex: 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 ex: birthdays at École Assiniboine

## 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 data including dates, observations, and what you do to the project.
- Maintain tables or charts in your logbook.
- Keep any surveys or notes.

## 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 (similar to this):

- Jan. & Feb. - Hand- in registration form and discuss plans with your teacher /parent
- Early Feb. - have all research materials and information for the project ready for use
- Mar.7 - have all of your research and data collection completed

- Mar.8 - bring the project to school to be corrected by homeroom teacher – **if it is in French**
- Mar.10 - prepare the backboard
- Mar. 18 - have your presentation ready and be ready to answer questions
- Mar. 20 – bring your project to school for judging

#### STEP 4 - Do the survey or research

- Look for information in your school and public library
- Contact places for information
- Experiment to find possible solutions to your problem
- Make notes, charts, and graphs in your log book about your data
- Keep all your notes in your logbook.

#### STEP 5 - Set up the project

##### A. Write the report

The report and project background may be typed or handwritten.

The written report should include: research question, written information, diagrams, pictures, graphs, charts, tables, glossary (mathematical 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/data collection?
- Conclusions: (Conclusion) – What did you learn?
- 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
- Be prepared to tell the judge about your project
- Build your backboard to the specifications or buy a Project Fair Backboard for \$1.75 from the school. Be sure to include all of the important information in your display. **The backboard should not exceed the dimensions of: 1m high, by 2m wide by 1m deep!**
- Don't forget to include your logbook, models, display items and other materials.

# Judging Form – Math

<u>Research &amp; Planning</u>	<u>Marks - 30 Total</u>
• Problem: clearly stated	1 2 3 4 5
• Hypothesis: Relevant	1 2 3 4 5
• Method: Steps stated	1 2 3 4 5
• Observations: demonstrated	1 2 3 4 5
• Conclusion: related to hypothesis	1 2 3 4 5
• Logbook – details & rough notes	1 2 3 4 5 (K–2 - No logbook required)

<u>Knowledge and presentation</u>	<u>Marks – 10</u>	<u>Total</u>
• Able to explain the project	1 2 3 4 5	
• Able to answer questions	1 2 3 4 5	

<u>General Appearance</u>	<u>Marks - 10</u>	<u>Total</u>
• Backboard: appearance (charts,, diagrams, pictures)	1 2 3 4 5	
• Display materials	1 2 3 4 5	

Total Score: \_\_\_\_\_  
50

Judge`s name: \_\_\_\_\_