

GRADE 8 – LEARNING THROUGH INVENTION

SPRING BREAK ACTIVITY

**Imagine
Innovate
Inspire**

Dear Parent

As part of the 'Cambridge Internal Assessment,' Merryland International School would like to provide an excellent platform for pupils to exhibit their talents in various subjects by participating enthusiastically in research and model making activities during this spring vacation.

Participation is compulsory as every child is expected to take part in at least 1 research of his/ her area of interest. The work will be marked for internal assessment and will also be on display for parents and important visitors.

All projects must be submitted on 10th April 2017

We request our dear parents to encourage your child to take active part in this activity as it helps develop writing, oral presentation, creative thinking, and problem solving skills.

Topics for Research

English

Culture

Model Making: Different land marks of their own country

Research: One's own culture- weddings and festivals

Science and Math

Finding an idea for the project can be the most difficult part. Some students spend more time looking for a topic than doing the actual experiment. Ideas for projects can come from many sources of the World Wide Web.

List of websites with topics and ideas

- <http://www.sciencekids.co.nz/projects.html>
- <http://www.scholastic.com/teachers/article/40-cool-science-experiments-web>
- http://www.scienceprojectresources.com/3rd_Grade_Science_Fair_Projects.asp
- <http://www.science-fair-guide.com/>
- <http://www.cool-science-projects.com/Science-Fair-Project-Ideas.html>
- <http://www.isd77.k12.mn.us/resources/cf/ideas.html>
- http://www.sciencebuddies.org/mentoring/register_guest.php 4.
- <http://www.twingroves.district96.k12.il.us/ScienceInternet/GetStarted.html>
- <http://www.all-science-fair-projects.com/>
- Love Math? Math Projects <http://camel.math.ca/Education/mpsf/>

- Energy Quest Science Fair Projects
<http://www.energyquest.ca.gov/projects/index.html#chemical>
- Electrochemistry Experiments
http://www.funsci.com/fun3_en/electro/electro.htm

Working and static models for

Math:

Model Making: Representation of quadratic curves, parabolic bridges

Research: Different types of graphs

Physics:

Model Making: NASA space exploration on any of the devices based on the reflection of light

Research: Light in the medical world- Application and usage.

Chemistry:

Model Making: contact process and Haber's process

Research: Artificial fertilizers and sulfur industry.

Biology:

Model Making: addiction like alcohol, tobacco and heroine

Research: Long term and short term effects of addictive substances

ICT:

Model Making: Impacts of Emerging technology

Research: robotics – Virtual reality

Business Studies:

Research: seven largest and successful Businesses in the world

Model Making: Innovative products