







# **Keatsway 19th Annual Science Fair 2016**

Who: All Keatsway students with an interest in science.

What: A non-competitive display of student science projects.

Why: To satisfy curiosity

To pursue personal interests

To learn something new

To develop a love of science

Where: Keatsway gym

When: Thursday, March 10th, 2016

We are asking for **\$3.00 per participant** as a registration fee to help cover costs of display boards and other expenses.

If you have any questions please contact Keatsway at 519-886-1650 or parent volunteers Sheila Vardy (<a href="mailto:srvardy@gmail.com">srvardy@gmail.com</a>, 519-886-5631) and Betty Pries (<a href="mailto:betty@bettypries.ca">betty@bettypries.ca</a>, 519-883-8906)

### **Science Fair Schedule**

March 1 <sup>st</sup> & 3 <sup>rd</sup> March 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> & 7 <sup>th</sup>	3:40-4:00 pm 8:45-9:20 am	<b>Registration,</b> in front of school gym. Please bring completed form & \$3 fee; pick up board.
Thur. March 10 <sup>th</sup>	8:15-9:20 am g school hours	Participants bring projects to gym for <b>set up</b> Class visits
	3:40-4:30 pm	*Presentations: Participants present their projects to science professionals.  Please make arrangements for student pick up ahead

6:00-7:30 pm \*Science Fair Open House. Take projects home at 7:30.
\* All participants are expected to attend both these events.

of time – phones will not be available for students to use

We are looking for **Science Professionals** (parents to engage the children in conversations about their projects) for March 10<sup>th</sup> from 3:40 to 4:30. This is always an enjoyable way to be involved! Please contact Betty if interested (see above) **Volunteers** are also **needed** for registration during the times listed, to help set up tables on the afternoon of March 9<sup>th</sup>, and to clean up after the open house. Please contact Sheila (see above) if you can help in any of these ways.



### About the Science Fair



Great reasons for students to participate in the Keatsway Science Fair are to satisfy a curiosity, to learn more about a favourite science topic, and to share a personal interest with others. Please note that our science fair is non-competitive. All participants will receive a certificate signed by one of our volunteer science professionals as recognition of their work.

The fair is an opportunity for students to perform original work and present it to an interested audience. Students gain confidence and receive recognition for their effort.

The starting point for a project may be asking Why?, What?, How?, When?, or Where? Answering any of these questions in regards to a selected science topic can form the basis of an appropriate exhibit.

Perhaps the most important aspect of science fair participation is that it helps students develop a curiosity about the world around them that will stay with them throughout their lives. While it is important that the projects are student-driven, family support can be very valuable in helping the students discover, analyze, research, and work through their questions, and present their projects.

Any reasonable level of involvement by a parent or other adult is acceptable. However, please remember that this is the work of the student and the objective is for the child to learn through his or her efforts. If the student can read and write, all reading and writing should be done by the student. The supervising adult(s) can facilitate the choice of topic and formulation of the question the project seeks to answer, and help the student with the logistics of how to present the results.

### **Choosing a Topic**

Students will enjoy the science fair experience more if they choose a topic of personal interest to them. A list of sample topics is provided below, but the possibilities are limitless! Keatsway has achieved Gold Eco-School Status and we encourage students to consider a "GREEN" Science Fair project. Students might look at advantages and disadvantages of renewable or non-renewable energy sources, compare types of light bulbs, research endangered species, deforestation, ocean habitat, over-fishing, disappearance of large fish, invasive species (zebra mussels, Asian longhorn beetle, emerald ash borer etc.), coral reefs in danger, waste management, composting, glacial and polar ice melt, desertification, soil erosion, over-packaging, or organic food production, to mention just a few options.

#### Sample Topics

#### **Animals and Plants**

Flowers Weeds Herb Gardens

Bees

Beneficial vs problem insects

Birds Mammals Frogs

Moths or butterflies

Pets

#### **Human Body**

Teeth
Digestive system
Circulatory system

Exercise Nutrition Skeleton

#### The Environment

Recycling

Endangered animals
The Greenhouse Effect

Wetlands Pesticides

Renewable energy

**Forests** 

Climate change

#### Earth and the Universe

Crystals

Rocks and minerals

Volcanoes Caves Glaciers Solar system Weather Light

#### **Machines and Technology**

Simple machines Conductors Electricity Robots

Photoelectric cells

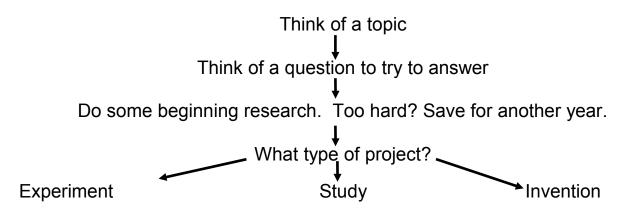
How a doorbell (or other device) works

Photography Rockets Planes Computers Electric cars

The International Space Station Communication satellites

Sound waves

## HOW TO APPROACH YOUR SCIENCE PROJECT



An experiment involves a test under controlled conditions to discover or demonstrate a fact or general truth. The work might involve multiple trials, observation, recording of the results, and then concluding what the student determines to be the answer to the original question.

Describe what you want to find out or demonstrate.

Identify variables and methods.

Record ALL results, expected and unexpected.

A study is a presentation of research. The research can be performed from any resource including the library, home, playground or park. A study is ideal for younger students as they can find topics of special interest and present what they know about the subject. The presentation may include use of any props available, such as pictures, models or other related objects.

More involved studies might also work well for older students who wish to research a complex topic in detail.

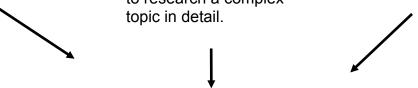
An invention is a original project that solves a real-life problem or creates an improvement to everyday life.

Describe what you are trying to make or improve and the purpose of your invention.

Record all ideas in a notebook.

Test your invention and keep records of failures and successes.

Even if you can't quite get your invention to work, you can talk about why and how you might improve it.



Analyze results, summarize findings, evaluate invention

Prepare your presentation

Put materials away

Be proud of your accomplishment! Look for ways to improve it!

# **Science Fair Project Planning Sheet**

## For Student Use Only – Do not Hand in

	The title might be:
δ.	The question which was asked
	The answer proposed before work began
<b>.</b>	If I'm doing an experiment, I think this will happen:
<b>)</b> .	Books and other references I might use:
	Some things I'll need to get are:
<b>3</b> .	What did I find out:
)_	The first three steps I will do to get started are:
<b>S</b> )	
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