Celebrating Scientific Inquiry Project Proposal

**DUE NOVEMBER 23 and 24, 2015**

Partner #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Partner #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Celebrating Scientific Inquiry* is a **mandatory** assignment. This assignment will be a major portion of your Term 1 and Term 2 report card mark. The following **curricular competencies** are met by completing the *Celebrating Scientific Inquiry* assignment.

**Questioning and predicting**

* Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
* Make observations aimed at identifying your own questions, including increasingly abstract ones, about the natural world
* Formulate multiple hypotheses and predict multiple outcomes

**Planning and Conducting**

* Collaboratively and personally plan, select, and use appropriate investigation methods to collect reliable data (qualitative and quantitative)
* Assess risks and address ethical issues associated with your proposed methods
* Select and use appropriate equipment to systematically and accurately collect and record data

**Processing and Analyzing Data and Information**

* Experience and interpret the local environment
* Seek and analyze patterns, trends, and connections in data, including describing relationships between variables and identifying inconsistencies
* Use knowledge of scientific concepts to draw conclusions that are consistent with evidence
* Analyze cause-and-effect relationships

**Evaluating**

* Evaluate your methods and experimental conditions, including identifying sources of error or uncertainty, confounding variables, and possible alternative explanations and conclusions
* Describe specific ways to improve your investigation methods and the quality of the data
* Demonstrate an awareness of assumptions, question information given, and identify bias in your own work and secondary sources
* Exercise a healthy, informed skepticism and use scientific knowledge and findings to form your own investigations to evaluate claims in secondary sources
* Consider social, ethical, and environmental implications of the findings from their own and others’ investigations
* Critically analyze the validity of information in secondary sources and evaluate the approaches used to solve problems

**Applying and Innovating**

* Contribute to care for self, others, community, and world through personal or collaborative approaches
* Co-operatively design projects with local and/or global connections and applications
* Transfer and apply learning to new situations
* Generate and introduce new or refined ideas when problem solving
* Contribute to finding solutions to problems at a local and/or global level through inquiry

**Communicating**

* Communicate scientific ideas, information, and perhaps a suggested course of action for a specific purpose and audience, constructing evidence-based arguments and using appropriate scientific language, conventions, and representations
* Express and reflect on a variety of experiences, perspectives, and worldviews of place

**A. Choosing a Partner:**

**Optional and HIGHLY DISCOURAGED!! Ask your classmates for examples of partnerships that did not work BEFORE you consider working with a partner.** If you’d like a partner, choose **WISELY**! Your partner must be in your class and your partner choice **MUST** be approved by your parents and the teacher. Approval is mandatory **prior** to completing this proposal.

**Teacher approval of partnership: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Did you ask yourself/partner?

(Please check the boxes only if you have a partner. If not, skip.)

* Can you work closely with him/her until February (and possibly beyond)?
* Do your schedules work so that you are able to meet outside of class?
* Is it okay with your parents to work with this person? Parents MUST sign this AFTER they have reviewed your project proposal and the *Celebrating Scientific Inquiry* timeline. Your term 1 report card mark will consist of your *Celebrating Scientific Inquiry* project marks along with a few other assignment marks. Your term 2 report card mark will include your final mark for your *Celebrating Scientific Inquiry* project.

**Parental Permission partner #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parental Permission partner #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Do you trust him/her to help with half of the work?
* Do you understand that the deadline for the ending of a partnership is **Wednesday December 2, 2015**, which is the last day of term 1? If your partnership has been dissolved you MUST complete a **new** project proposal that is due **Friday December 11, 2015.** This new proposal must be reapproved by your parents and the teacher.
* Do you understand that each partner is responsible for their background research and for completing their **own** research paper?

**B. Topic Choices**

**Remember that you can expand upon an existing project. If you want to improve your project from last year, you are welcome to do so provided that your project from last year meets all of the requirements for this year.**

Did you: (Please check)

* Choose something you are truly interested in?
* Consider the time of year? (e.g. If you need to be outside to collect data, do it before the snow hits!)
* Choose a topic that allows you to design an experiment or innovation? Remember that social science and psychology topics are NOT allowed. Surveys are also NOT allowed.
* Choose an original topic? Your topic should not have been completed by many other students. Your topic should not be found on *www.sciencebuddies,org* as many of these projects do not meet the requirements for originality, safety and ethics. Projects that focus on the environment and innovations around the environment have done very well at the district and regional level in the past few years.
* Consider the complexity of your topic. Your topic should be an appropriate level for a student in grade 9. You should not be able to determine the results of your experiment **before** you complete the experiment.
* Consider the safety and ethical considerations? Remember if you have human participants, EVEN IF IT IS JUST YOU, you MUST have the appropriate form for human participation completed **prior** to the experiment. You must also have a consent form (from their guardian if under the age of 18) for **each participant.** Each participant should be informed. You need to provide them with a project summary letter **prior** to having them participate and signing the consent form.
* Ensure that there is enough background information to complete a research paper?
* Check you have ONE independent variable (one factor you are testing)?
* Check you have a dependent variable (MUST be able to MEASURE it)?
* Determined if it’s possible to control the necessary variables in order to make it a fair test?
* Check that your variables work! Fill in the blanks and make sure it makes sense!

How does \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ affect \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

 Independent Variable Dependent Variable

**C. Big No-No's**

My project has: (Please check)

* No consumption of food or drink (e.g. no energy drink testing)
* No cruelty to humans (e.g. sleep deprivation) or animal subjects
* No explosives, firearms, weapons, pesticides, or hazardous (including biological) materials
* No surveys of preference (e.g. Which is better, Coke or Pepsi?)
* No product testing (e.g. Which shampoo/gum/moisturizer/etc. is the best?)
* Nothing blatantly obvious (e.g. Do plants grow better in light or dark?)
* No surveys relating to social sciences or psychology (e.g. How does music affect mood? What are you afraid of?)
* Surveys in general are **highly** discouraged! (Please ask some of your classmates that tried to complete a project with surveys last year how their project went before you try to complete a project that involves a survey.) Remember you need to provide a letter to each participant with an outline of your project and have a signed informed consent form (signed by guardians) for **each** participant in your survey. You also need to collect enough data to determine if the data is valid. This is a **minimum** of 30 subjects!

1. **Project Summary:**

|  |  |
| --- | --- |
| **Title of Project** (Try to make it interesting/funny/ creative/catchy) |  |
| **Independent Variable** (What factor are you testing? 1 only.) |  |
| **Dependent Variable** (What are you measuring for your results? What are the units? 1 only.) |  |
| **Control Variables** (What stays the same throughout? List AT LEAST 5. Try for 10.) |  |

1. **What question** are you going to answer? (What is your topic?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. **Why** do you think this is an important topic to research? (Why does it matter? What would it help solve?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What is your **hypothesis**? (What do you think you are going to find out?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Before you start your project, you will need to do some background research on your topic. Find **at least** 3 possible resources (books, websites). (NO WIKIPEDIA or “answers.com” type sites.)

a) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. What **materials** do you think will you need for your study or experiment? (Be specific – amounts/sizes/cost. Be sure you can afford it and know where they can be found or purchased. KLO cannot provide consumable materials.) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Using numbered steps, outline the proposed **procedure** for your project. How will you get your results? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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7. List the **risks** involved and what **safety precautions** you will take to make this project safe. (Include “consent forms required” if you are including human or animal subjects. Include MSDS.) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*#1: I am aware of any safety and ethical concerns of this project and give my child permission to complete this activity. I will supervise my child while completing this activity if adult supervision is required.*

*Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*#2: I am aware of any safety and ethical concerns of this project and give my child permission to complete this activity. I will supervise my child while completing this activity if adult supervision is required.*

*Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

8. What help will you need from your parents? (Supplying materials, setting up, etc.)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. FOR PARENTS/GUARDIANS:

**IMPORTANT:**



Suggested timeline:

* November: Submit proposal
* November and December: Background research and planning and begin conducting experiment
* December and January: Conduct experiment, complete report and display board.
* January 18 – 22 2016: Classroom presentations
* February 15 2016 4-6 pm: School presentations
* March 9 2016: Possible date for district presentations

*#1) I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, give my student, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,*

 *Parent Name Student Name*

*permission to do the above science fair topic on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

 *Summarize Topic*

*I am aware that the KLO Celebration of Scientific Inquiry is* ***February 15, 2016 and in-class presentations are January 18-22 2016.*** End of term 1 is **Wednesday December 2, 2015,** so all assignments assigned prior to this date are due prior to this date. The final assignment mark will be part of the term 2 report card mark as well. **The final project due date is Friday January 15, 2016. All assignments will be reviewed and marked prior to the classroom presentations.** Late work will not be accepted. Students that do not complete their project on time will be required to complete an "I package." Students will be given **plenty** of class time to complete this assignment and will be required to hand in portions of the assignment prior to the class presentations. You will be able to follow your child's progress by ensuring these assignments have been handed in on time.

*Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*#2) I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, give my student, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,*

 *Parent Name Student Name*

*permission to do the above science fair topic on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.*

 *Summarize Topic*

*I am aware that the KLO Celebration of Scientific Inquiry is* ***February 15, 2016 and in-class presentations are January 18-22 2016.*** End of term 1 is **Wednesday December 2, 2015,** so all assignments assigned prior to this date are due prior to this date. The final assignment mark will be part of the term 2 report card mark as well. **The final project due date is Friday January 15, 2016. All assignments will be reviewed and marked prior to the classroom presentations.** Late work will not be accepted. Students that do not complete their project on time will be required to complete an "I package." Students will be given **plenty** of class time to complete this assignment and will be required to hand in portions of the assignment prior to the class presentations. You will be able to follow your child's progress by ensuring these assignments have been handed in on time.

*Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

12. FOR TEACHER:

*I approve of the above "Celebrating Scientific Inquiry" topic and project proposal. Any significant variations in topic or procedure must be discussed with me and reapproved. This sheet must be included in your final science fair report folder to show you stuck to your approved plan. If you change your topic, or alter your procedure significantly you MUST complete a new proposal form and get approval from your parents and the teacher.*

*Teacher Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*