

# Science Fair Brainstorming Guide

Name: \_\_\_\_\_

Date: \_\_\_\_\_

It's that time of the year, time to start thinking about your Science Fair topic for the 2017-2018 school year. Please complete

the guide below and have it turned in to your science teacher by August 18th. Topic selections are in a first-come basis. All projects must be unique and cannot be duplicated among each grade level.

## COMING UP WITH AN EXPERIMENT...

### 1. BRAINSTORMING: *First, you need to think of things that actually interest you in science.*

Do you like plants? Do you have a particular hobby? Do you like chemistry? This is the place to start brainstorming. You can come up with some possible questions about your topic that will take an experiment to answer. In the space below, outline three interests, and identify problems and questions that you can design an experiment around. Pick at least three possible topics and write a question for each topic. When you are finished, pick your top choice and write your experiment question on step 3.

<u>THINGS I LIKE:</u>	<u>What is a problem you see within this topic</u>	<u>QUESTIONS ABOUT TOPIC:</u>
EXAMPLE: Gardening, and taking care of the environment	PROBLEM: High levels of carbon dioxide in house hold air.	1. What type of house plants give off the most oxygen?

### 2. CHECKLIST TO SEE IF YOU HAVE A GOOD QUESTION:

\_\_\_ Does it meet Guidelines? (*no models, avoid human testing, no animal testing, no product testing, etc. You can find further information on guidelines for your science fair project on <https://palmbeach.zfairs.com/>*).

\_\_\_ Am I interested in the answer?

\_\_\_ Can I find research on the topic?

\_\_\_ Does it solve a problem or address a concern or need?

\_\_\_ Can I do all or most of the project on my own?

\_\_\_ Is it something that requires an experiment to answer?

\_\_\_ Can the results of the experiment be measured in some way?

\_\_\_ Can I get the materials necessary?

\_\_\_ Will my parents and teacher approve of it?

### 3. TOP CHOICE ON YOUR SCIENCE FAIR TOPIC: Write the question that you are going to answer with an experiment for your TOP CHOICE on the lines below.

### 4. WHAT CATEGORY WOULD YOU BE COMPETING UNDER? For more information about each category, please visit: <https://palmbeach.zfairs.com/Files/Client10011/2016%20Categories.pdf>

\_\_\_ Animal Sciences

\_\_\_ Environmental Engineering

\_\_\_ Behavioral & Social Sciences

\_\_\_ Intelligent Machines, Robotics and Systems Software

\_\_\_ Biomedical & Health Sciences

\_\_\_ Microbiology

\_\_\_ Cellular/ Molecular Biology & Biochemistry

\_\_\_ Mathematics & Computational Sciences

\_\_\_ Chemistry

\_\_\_ Physics & Astronomy

\_\_\_ Earth & Environmental Sciences

\_\_\_ Plant Sciences

\_\_\_ Engineering