

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

### 2018 Science Fair Project Planning Packet

<b>Complete</b>	<b>Due Date</b>	<b>Task to Complete</b>
	11/5/2018	Choose topic and write project question
	11/9/2018	Get approval from your teacher
	11/12/2018	Research your topic and write key words and a paragraph
	11/16/2018	Write a hypothesis
	11/26/2018	Design an experiment List variables and write procedure List and gather your materials
	12/2/2018	Conduct experiment and record data and observations
	12/10/2018	Create a table, chart, or graph of the data Draw Conclusions
	12/17/2018	Turn in project display Write and print abstract Turn in Planning Packet to teacher (or ensure that all assignments have been turned in via Google Classroom)
	12/20/2018	Present your project at the Science Fair

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

Due: Monday, November 5, 2018

### 2018 Science Fair - Project Question

**Think of a Question** - Your question will drive your entire project. Make sure that your question is something that can be measured and answered by following the scientific process. Your question will also be the title of your project.

#### Project Question

---

---

---

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

Due: Monday, November 12, 2018

### Research / Keywords

**Research Your Topic** - Spend some time learning more about your topic. Use reliable internet sources, books from the library, magazines, and other dependable resources. *Not only do you want to be an expert on your topic, but you want to teach others about your topic.*

**Keywords** - Locate at least three key science words related to your topic. Your resources are an excellent place to find these. Make sure that the words you choose are directly related to your topic. Provide a definition of each keyword IN YOUR OWN WORDS.

Keyword	Keyword Definition

A **paragraph** describing the science behind your project - After you have completed your research write some background information on your topic in a complete and well-written paragraph (5-7 sentences). Give specific, rather than general information. Use the space provided to write a draft. You will edit a final copy to place on your display board.

**Research Description (continue on back if you need more room)**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

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

Due: Friday, November 16, 2018

### Hypothesis

**State Your Hypothesis** - Decide what you think the outcome of the project will be and make a good guess as to what you think the answer to your question will be. Also explain WHY you think that will be the outcome. Remember, it is ok if you don't have the right answer; that is how scientists make discoveries. Make sure that your hypothesis is written in complete sentences.

### Hypothesis

---

---

---

---

---

---

---

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

Due: Monday, November 26, 2018

### Experiment Design

**Design Your Experiment** - Clearly write out the procedure you are going to follow. Remember that your experiment needs to follow the scientific process and that you need to have one variable that you are going to change.

**Variables** - List the variables that you are going to keep the same and the one variable that you are going to change. You need to have at least one control variable and at least two to three other variables.

**Control Variable:** \_\_\_\_\_

---

---

**Variables to keep the same:** \_\_\_\_\_

---

---

**Variable to change (Independent Variable):** \_\_\_\_\_

---

---

**Write your procedure** - Think through each step very carefully and list them in numbered order.

**Procedure**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

**Gather Materials** - List all the materials that you will need to complete your experiment.

**Materials**

---

---

---

---

---

---

---

---

---

---











**Draw Conclusions** - After you have determined the results, it is time to decide the answer to your original question. Write your answer in a complete sentence using the question to begin your answer. You also need to tell whether your hypothesis was correct or incorrect. If it was incorrect, explain why you think so. End this paragraph by saying how you could change or improve your experiment in the future.

**Answer to your original question:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Was your hypothesis correct or incorrect? If incorrect, why?** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**If you were to complete this experiment again, what changes would you make? How would you improve this experiment?** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

Due: Monday, December 17, 2018

### Display Board

**Display board** - The board is graded on the information it contains, not how colorful or pretty it looks. Your display board must have ALL of the following components. Other board guidelines:

- a. Font should be easy to read and at least a size of 16 pt or greater
- b. Photos should not include faces of students
- c. Information on the board can be typed or written neatly by hand

### Display Board / Tri-Board

<p>Hypothesis</p> <div data-bbox="232 758 440 905"></div> <p>Key Words and Research</p> <div data-bbox="232 1024 440 1171"></div> <p>Procedure and Materials</p> <div data-bbox="232 1268 440 1415"></div>	<p>Question</p> <div data-bbox="526 758 1104 842"></div> <p>Photos or Drawings</p> <div data-bbox="526 982 1104 1129"><div data-bbox="526 982 688 1129"></div><div data-bbox="732 982 894 1129"></div><div data-bbox="938 982 1101 1129"></div></div> <p>Graphs</p> <div data-bbox="618 1234 1013 1381"><div data-bbox="618 1234 781 1381"></div><div data-bbox="850 1234 1013 1381"></div></div>	<p>Results</p> <div data-bbox="1198 758 1409 1024"></div> <p>Conclusions</p> <div data-bbox="1198 1136 1409 1402"></div>
--	---	--



### Science Fair Grading Rubric

Component	Points Possible	Points Received
<b>Project Planning Packet</b>	10 points	
<b>Display Board</b> with: <ul style="list-style-type: none"> <li>- Question/Title</li> <li>- Hypothesis</li> <li>- Key Words</li> <li>- Research</li> <li>- Procedure and Materials</li> <li>- Photos/Drawings</li> <li>- Chart or Diagram</li> <li>- Results</li> <li>- Conclusion</li> </ul>	10 points	
<b>Abstract</b>	10 points	
<b>Question</b> is relevant and testable through experimentation	5 points	0 1 2 3 4 5
<b>Hypothesis</b> is based on observations	5 points	0 1 2 3 4 5
<b>Keywords</b> and research are relevant to the question being tested	5 points	0 1 2 3 4 5
<b>Procedure</b> is clearly outlined and presents a controlled experiment	5 points	0 1 2 3 4 5
<b>Results</b> are communicated clearly through the graph/chart	5 points	0 1 2 3 4 5
<b>Procedure</b> is clearly outlined and presents a controlled experiment	5 points	0 1 2 3 4 5
<b>Results</b> are communicated clearly through the graph/chart	5 points	0 1 2 3 4 5
<b>Conclusion</b> includes appropriate evaluation of data and proves or disproves the hypothesis	5 points	0 1 2 3 4 5
<b>TOTAL POINTS</b>	70 points	

0 Not Presented	1 Far Below Expectations	2 Just Below Expectations	3 Meets Expectations	4 Above Expectations	5 Exceeds Expectations
--------------------	--------------------------------	---------------------------------	----------------------------	----------------------------	------------------------------