THINGS I LIKE

1. ___________________________________________ 6. ___________________________________________

2. ___________________________________________ 7. ___________________________________________

3. ___________________________________________ 8. ___________________________________________

4. ___________________________________________ 9. ___________________________________________

5. ___________________________________________ 10. ___________________________________________

TOP TWO TOPICS

1. ___________________________________________ 2. ___________________________________________
PICK A TOPIC

Make lists of things you know about your two favorite topics, things that remind you of the topics, things you don't know, and things you would like to know.

For example—POPSICLES: frozen juice, mostly water, taste good, refrigerator, melt, different flavors. Can you freeze any juice into a popsicle? Can you make a popsicle out of soda? Do some juices freeze faster than others? Do some popsicles melt faster than others?

<table>
<thead>
<tr>
<th>TOPIC ONE</th>
<th>TOPIC TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>5.</td>
<td>5.</td>
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</tbody>
</table>

QUESTIONS

| 1.        | 1.        |
| 2.        | 2.        |

TOPIC AND QUESTION

Look at the lists and pick a topic and question you want to answer. Make sure it is a question you can answer by doing a test. Make sure you can get the materials you need. Write the question here:

For example: Do popsicles made from orange juice melt faster than popsicles made from apple juice?
Four Question Strategy for Inquiry Question Development:

Student name: _______________________

Q1: A topic I can realistically investigate is:

______________________________________.

Q2: A ____________ usually acts in the following ways:

a. ___________________________________

b. ___________________________________

c. ___________________________________

d. ___________________________________

e. ___________________________________

Q3: I can change the actions of the ________________ by changing the:

a. ___________________________________

b. ___________________________________

c. ___________________________________

d. ___________________________________

e. ___________________________________

Q4: I can measure the change of the actions by using a __________ and the units ____________.

a. ___________________________________

b. ___________________________________

c. ___________________________________

d. ___________________________________

e. ___________________________________

A question that I can investigate about ________________ is:
The question I plan to investigate in my experiment *(please phrase as a question)*:

<table>
<thead>
<tr>
<th>Science Fair Project Question Checklist</th>
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</thead>
<tbody>
<tr>
<td>1. Your teacher may put some restrictions on projects. Have you met your teacher’s requirements?</td>
<td>Yes / No</td>
</tr>
<tr>
<td>2. Is the topic interesting enough to read about, then work on for the next couple months?</td>
<td>Yes / No</td>
</tr>
<tr>
<td>3. Can you find at least 3 sources of written information on the subject?</td>
<td>Yes / No</td>
</tr>
</tbody>
</table>
| 4. Can you measure changes to the important factors (variables) using a number that represents a quantity such as a count, percentage, length, width, weight, voltage, velocity, energy, time, etc.? Or, just as good, are you measuring a factor (variable) that is simply present or not present? For example,  
  - Lights ON in one trial, then lights OFF in another trial  
  - USE fertilizer in one trial, then DON'T USE fertilizer in another trial | Yes / No |
| 5. Can you design a "fair test" to answer your question? In other words, can you change only one factor (variable) at a time, and control other factors that might influence your experiment, so that they do not interfere? | Yes / No |
| 6. Is your experiment safe to perform? | Yes / No |
| 7. Do you have all the materials and equipment you need for your science fair project, or will you be able to obtain them quickly and at a very low cost? | Yes / No |
| 8. Do you have enough time to do your experiment more than once before the science fair? | Yes / No |
| 9. If you are planning to enter a science fair outside of your school:  
  - Does your project meet all the rules and requirements for the science fair?  
  - Have you checked to see if your science fair project will require approval from the fair before you begin experimentation? | Yes / No |

I have discussed the project idea and the checklist with my parent(s) and I am willing to commit to following through on this project.

**Student Signature**

**Date**

I have discussed the project idea and the checklist with my student and I believe he or she can follow through with this project.

**Parent Signature**

**Date**