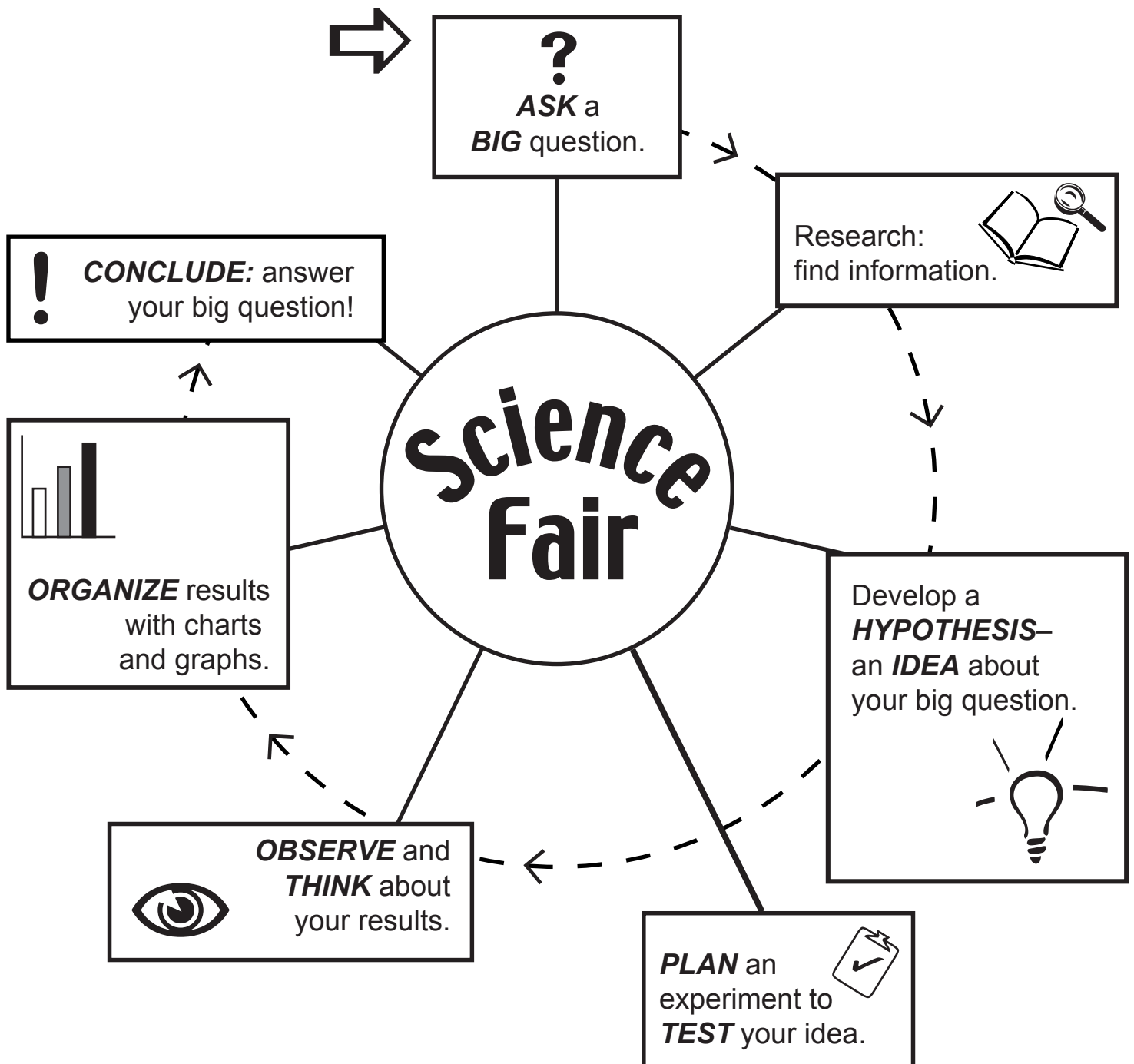


What's Important?



Think it through.

Keep It Simple, Smarty!

Use this checklist to organize your science project.

- Step 1. Make a short list of things you are interested in learning about.** *Choose one topic that interests you and make sure you can find information on it! For example, creating a rocket is complex, but contrasting different kinds of road salt is easy and appropriate, and you will find lots of information about icy roads and road salt.*
- Step 2. Form a big question to ask about your topic.** *Focus on a question you hope to be able to answer as you explore this topic.*
*** This is your PURPOSE**
- Step 3. Gather information about your topic.** *Use the research guide to help organize information you find in books, encyclopedias, and on-line to compile an interesting summary of a topic related to your experiment.*
***This is your REVIEW OF LITERATURE.**
- Step 4. Form an educated guess about your big question.** *Guesses or predictions do not have to be correct. Great scientific discoveries have come from making mistakes!!*
*** This is your HYPOTHESIS.**
- Step 5. Create an experiment that can help answer your big question.** *Write out the steps you will take in your experiment, list your materials, and don't forget variables and controls!!*
***This is your PROCEDURE.**
- Step 6. Carry out your experiment and record everything that happens.** *Try your experiment several times in order to collect as much data as possible.*
***These are your RESULTS (data) and should be organized on charts and graphs.**
- Step 7. Decide if your experiment helped answer your big question.** *If not, think of ways you might improve your project. You may need to make some changes.*
*** This is your CONCLUSION.**

Name: _____ Grade: _____

Connecting Variables and Controls to your PURPOSE.

PURPOSE :

(What do you want to find out by doing your experiment ?)

A variable is something you change as you do your experiment. It is connected to your purpose. *For example, if your purpose is to find out if a car's shape affects its speed down a ramp, you might build three cars, each with a different shape. Car **shape** is your **variable**. (Try to stick with just one variable.)*

What is the variable you will be keeping track of in your experiment ?

Controls are things you keep the same as you do your experiment. *If you're trying to find out if shape affects how fast a car goes down a ramp, you would keep things such as the ramp size, weight of car, size of tires, etc., the same for all cars tested. These things that **stay the same** are your **controls**.*

What are the controls in your experiment ?

Why is it important to have these controls ?

Use this page to help organize your research.

WHAT I READ (SOURCE OF INFORMATION) _____ .

Important words	
<i>Word</i>	<i>What it Means</i>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Important Information

- _____
- _____
- _____
- _____
- _____

MAIN IDEAS from this Information:

Use this sheet to organize your EXPERIMENT

Purpose

- *What do you want to find out by doing your experiment ?*

Hypothesis

- *Form an educated guess about your big question. Don't worry about wrong predictions!!*

Procedure :

(The steps I will take in my experiment)

List your Materials:

Use this sheet to illustrate your experiment.

Draw a Picture of your experiment:

(Label the important parts !!)

Use this sheet to organize your RESULTS and DATA

Results:

- *Explain everything that happened when you did your experiment.*

Draw a chart to organize measurements or observations.
(use graph paper on the back of this sheet to graph this data.)

