

Okay, now get to work on your project!!  
What's that? You still need help getting started?

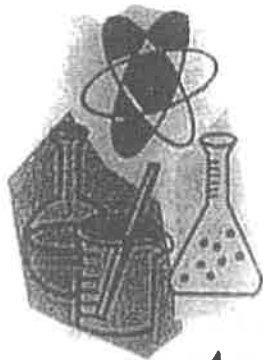


Introducing:

The Most Fabulous, Scientific, All Helpful,  
Kid Friendly and Most Excellent Science Fair  
Project Planner Known to Kid Kind:

# Andersen Elementary Science Fair Planning Guide

Just follow these easy steps and you too can create a wonderful  
award winning science project, thought up entirely by you!!!



**VERY IMPORTANT:** *Before you turn this page, recruit an adult to help you. They come in very handy, especially if you are nice to them and tell them you won't blow up anything....*

My adult's name is \_\_\_\_\_

From this point forward you are now... **A SCIENTIST!!**

**Andersen Community Arts and Academic Fair**  
**Thursday, January 16th**  
**4:30 - 7:00pm**

# Types of Science Projects:

There are two types of science projects: Models and Experiments. Here is the difference between the two:



## A Model, Display or Collection:

Shows how something works in the real world, but doesn't really test anything.

Examples of display or collection projects can be: "The Solar System", "Types of Dinosaurs", "Types of Rocks", "My Gum Collection..." Examples of models might be: "The Solar System" or "How an Electric Motor Works", "Tornado in a Bottle".

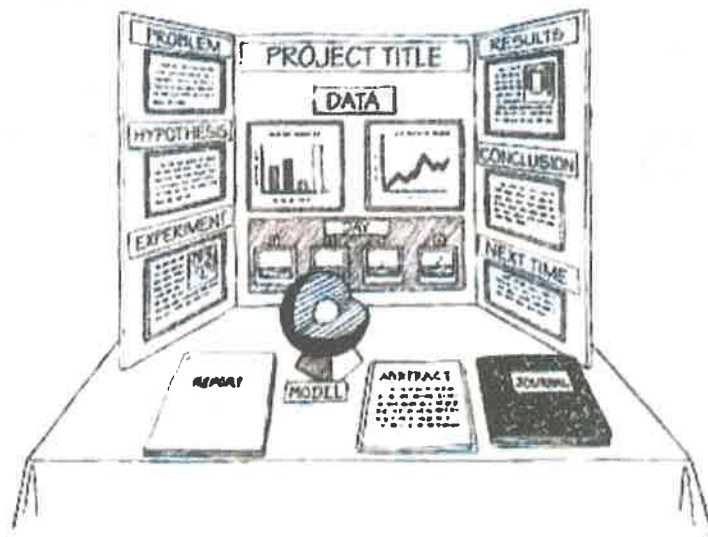
COOL!!! DO THIS

## An Experiment:

Lots of information is given, but is also has a project that shows testing being done and the gathering of data.

Examples of experiments can be: "the effects Detergent on the Growth of Plants", "Which Paper Towel is more Absorbent" or "What Structure can Withstand the Most Amount of Weight"

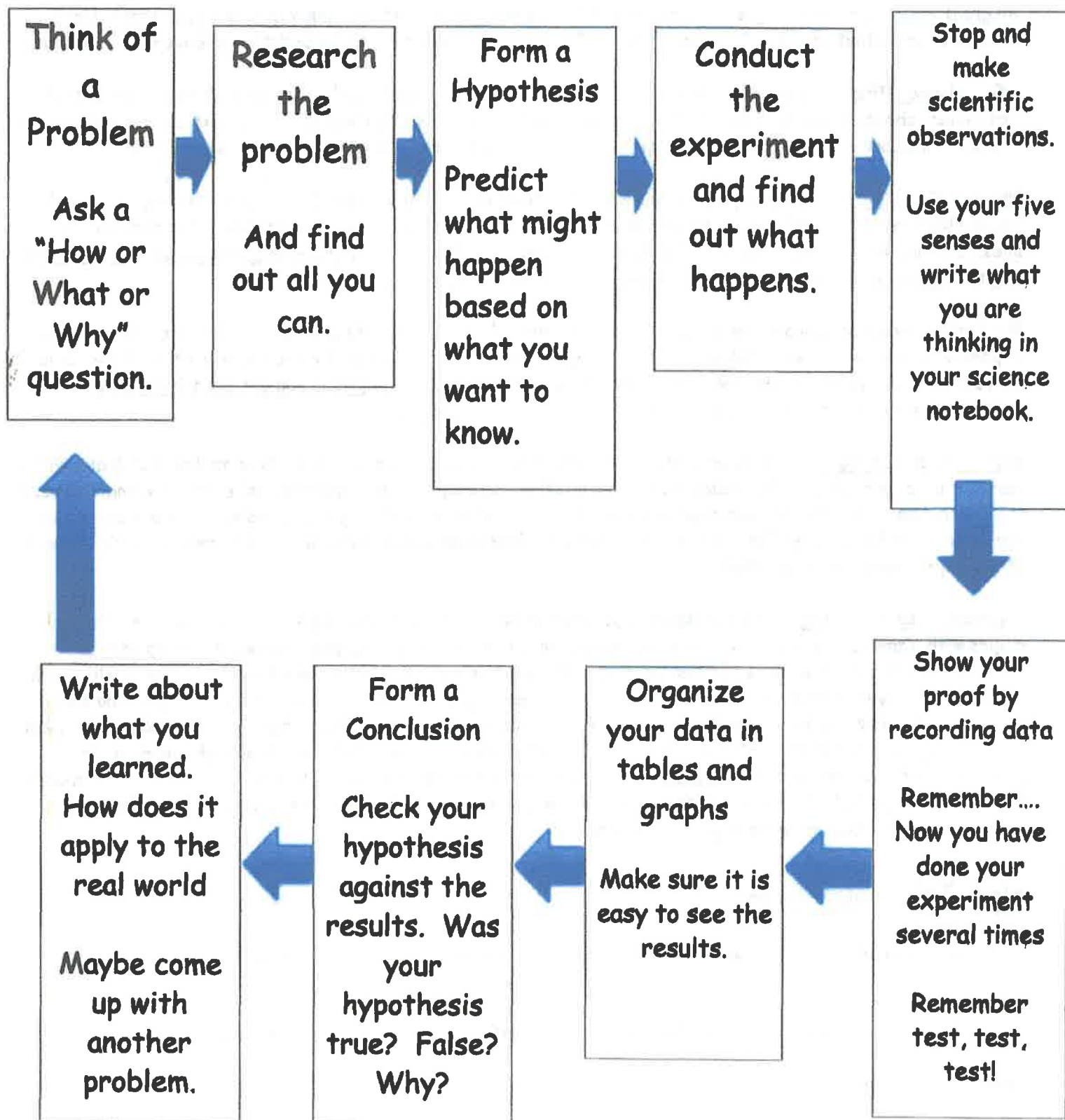
You can tell you have an experiment if you are testing something several times and changing a variable to see what will happen. We'll talk about variables later...



So What Types of Project Should I Do?

Even though you can learn a lot from building a model or display, we recommend that you do an Experiment or Investigation!!! Why? Well, they are fun, they are more interesting and most of all, they take you through the SCIENTIFIC METHOD, which is the way real scientists investigate in real science labs. Besides that, the SCIENTIFIC METHOD is what the judges are looking for.

# What is the Scientific Method???



## Choosing a category that interests you...

**All great Projects start with great questions but before you get started on a great question you need to pick a subject or topic that you like. There are four different categories of the Science fair to choose from. They are:**

**Life Science:** This category with all animal, plant and human body questions that you might have and want to do an experiment about. Remember that it is against Science Fair Rules to intentionally harm plants, as long as they don't belong to someone else, like don't do an experiment on your mom's rose bushes unless you ask her first...

**Physical Science:** If you like trying to figure out how things work, then this is the category for you! It includes topics about matter and structure, as well as electricity, magnetism, sound, light or anything else that you might question, "How does it work and what if I do this to it, will it still work?" But remember, you always need to ask an adult first (and always make sure there is one of those adult guys with you when you try it.)

Physical Science also includes the composition of matter and how it reacts to each other. These are the science experiments that may have bubbling or oozing going on, like figuring out what is an acid and what is a base. It is a perfect category to try to mix things together to see what will happen. Again, if you are experimenting with possibly dangerous things, you need to recruit an adult to help you out.

**Earth and Space Science:** This category is really awesome because it covers all sorts of topics that deal with the Earth or objects in space. This includes studying weather, geology (which is the study of everything that makes up the Earth, like rocks, fossils, volcanoes, etc.), and the study of all that is in space, including the stars, our sun and our planets. Unfortunately this topic is also where most kids mess up and do a collection or model project instead of an "Experiment," so be carefull!!!

**Engineering or Technology:** This category is so amazing because it is science applied to everyday life. Technology begins with a task or a system that hasn't been done or is already being done and it allows new equipment or gadgets to work better or more efficiently! Engineering is figuring out a better way to make an idea work. Think of how it could work better or faster if you changed something. In technology, think of something you do every day and divide that into the separate steps that make it happen. This is the foundation for technology. Now what are the steps to make it happen? For example, when cell phones were invented. People already talked on the phone, but with cell phones they could carry a phone with them to make a call right away. This made communication faster and easier, right? Making cell phones smaller or less expensive is an example of engineering. Then smart phones took advantage of technology in a new way.

### Now It's Your Turn:

**Write down your favorite Science Fair Category and what it is you want to learn more about:**

My favorite Category is is \_\_\_\_\_  
(Life Science, Physical Science, Earth and Space Science, or Engineering Technology)

I want to do an experiment involving \_\_\_\_\_

## Step #1: Coming up with a good question...

Now that you have picked out a topic that you like and that you are interested in, it's time to write a question or identify the problem of your topic. To give you an idea of what we mean you can start off by filling in the question blanks:

### *The effect Question:*

What is the effect of \_\_\_\_\_ on \_\_\_\_\_ ?

\*Examples:

sunlight  
eye color  
brands of soda  
temperature  
oil

the growth of plant  
pupil dilation  
a piece of meat  
the size of a balloon  
a ramp



### *The how does affect question:*

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

\*Examples:

color of light  
humidity  
color of a material

the growth of plants  
the growth of fungi  
its absorption of heat

### *The which/what and verb question:*

Which/what \_\_\_\_\_ (verb) \_\_\_\_\_ ?

\*Examples

paper towel  
foods  
detergent

is  
do  
makes

most absorbent  
meal worms prefer  
the most bubbles



### *Engineering or Technology Question:*

What interests me \_\_\_\_\_ (noun) \_\_\_\_\_ ?

\* Example: How can I make it work (faster or better, at a lower cost or in a new way)  
Create your Science fair question using one of the three options above!

# Due: *Friday, December 13th*

Submit form found on the last page of this packet.



## *Step #2: Doing the Research and forming a Hypothesis...*

You have picked your category and you have chosen a topic. You also wrote a question and now its time to do some **RESEARCH!!!** You will do so much that you will become an expert at your topic just like real scientist do in real labs.

*How do you become an expert??*

**You READ!!!!**



It is important that you read about your topic. You can read encyclopedias, magazines articles and books from the library. Also, read articles from the Internet. Don't forget to take notes of any new things you learn including words so you can use them. It will make you sound like a real scientist!! Keep track of all the books and articles you read, you will need them later.

**You DISCUSS!!**



It is important to talk about your topic with your parents, teachers, and experts in the field like veterans, doctors, weathermen or others who work in the things you are studying. Sometimes websites will give you an email addresses to experts who can answer questions **But don't forget to ask an adult to supervise** before you write to anyone on the Internet. Also, take pictures of any interviews you do with people.

*Finally...*

Then when you think that you can't possibly learn anymore and the information just keep repeating itself You are ready to .

*Form a HYPOTHESIS...*

Now it is time to predict what you think will happen if you test your problem This type of "Educated Guess" or **PREDICTION** is what real scientist calls a **HYPOTHESIS**. This will have you thinking like scientist.

How do you begin? Well, just answer the following question

*What do you think will happen? (Before you start your experiment)*

**Example of problem:** Which paper towel is more absorbent?

**Example of Hypothesis:** I think Brand X will be more absorbent because it's a more popular brand. It is thicker and the people I interviewed said that the more expensive brands would work better. (This hypothesis not only predicts what will happen in the experiment, but also shows that the "Scientist" used research to back up their predictions.)

## Now it's your turn:

Write down the problem and form your Hypothesis based on your research.

**Problem:** \_\_\_\_\_

**Research:** My problem is about this subject: \_\_\_\_\_

(Sample topics could be magnetism, electricity, buoyancy, absorbency, taste, plant growth, simple machines, building and testing a contraption, creating a set of instructions for a computer or robot that can be tested, or other scientific topics that relate to your problem. If you are having problems finding out what the topic is, ask your teacher or an adult to help you on this one ...)

**Books I found in the library on my topic are:**

**Title:**

**Author:**

**Internet sites that I found on my topic are:**

**People I talked to about my topic are:**

**Some important points that I learned about my topic are:**

\* \_\_\_\_\_

\* \_\_\_\_\_

\* \_\_\_\_\_

\* \_\_\_\_\_

**Hypothesis:** I think that \_\_\_\_\_  
(will happen) because ( my research shows ... )

### *Step 3: Testing your Hypothesis by doing an experiment*

Now we've come to the good part. The part that all scientists can't wait to get their grubby little hands on. . .you guessed it. . . The EXPERIMENT!

Designing an experiment is great because you get to use your imagination to come up with a test for your problem, and most of all, you get to prove (or disprove) your Hypothesis. **Now Science Fair Rules state that you cannot perform your experiment live, so you'll have to take plenty of pictures as you go through these seven very simple steps.**

**First: Gather up your materials:** What will you need to perform your experiment? The safest way to do this is get that adult you recruited to help you get the stuff you need. Oh did we mention to take pictures or draw pictures of your materials. This will come in handy when you are making your board display.

**Second: Write a PROCEDURE:** A procedure is a list of steps that you did to perform an experiment. Why do you need to write it down? Well it's like giving someone a recipe to your favorite dish. If they want to try it, they can follow your steps to test if it's true. Scientists do this so that people will believe that they did the experiment and also to let other people test what they found out. Did we mention to take pictures of yourself.

**Third: Identify your variables:** The variables are any factors that can change in an experiment. Remember that when you are testing your experiment you should only **test one variable at a time** in order to get accurate results. In other words, if you want to test the affect that water has on plant growth, then all the plants you test should be in the same conditions, these are called **controlled variables:** same type of dirt, same type of plant, same type of location, same amount of sunlight, etc. The only variable you would change from plant to plant would be the amount of water it received. This is called the **independent or manipulated variable.** The independent variable is the factor you are testing. The results of the test that you do are called the **dependent or responding variables.** The responding variable is what happens as a result of your test. Knowing what your variables are is very important because if you don't know them you won't be able to collect your data or read it.

**Fourth: TEST. TEST. TEST:** Remember that the judges expect your results to be consistent in order to be a good experiment. In other words, when you cook from a recipe you expect the outcomes to be the same if you followed the directions (or procedure) step by step. So that means you need to do the experiment more than once in order to test it properly. We recommend five times or more. **More is better!** Don't forget to take pictures of the science project being done and the results.

Observation is a ***very important part of this step!*** Remember to use your five senses to gather information as you conduct your investigation. Then record the information in careful detail. Don't forget to record everything! See Science Journal below.

**Fifth: Collect your DATA:** This means write down or record the results of the experiment every time you test it. Be sure to organize it in a way that it is easy to read the results. Most scientists use tables, graphs, and other organizers to show their results. Organizing makes the results easy to read, and much easier to recognize patterns that might be occurring in your results. (And, don't forget, it impresses the judges when you use them.) But don't make a graph or table because we asked you to, use it to benefit your project and to help you make sense of the results. There is nothing worse than having graphs and tables that have nothing to do with answering the question of a science project.



## Hold On. How Do You Collect Data?

### Science Journal:

Is a type of science diary that you can keep, especially if your experiment is taking place over a long period of time (should be a week or more).

- Observations
- Collect research
- Draw/diagram pictures
- Questions

### Tools:

Make sure you have the things you need to take accurate measurements. Metric is the recommended standard of measurement in science. (meters, liters, Celsius, grams, etc.)

- Rulers
- Meter tapes
- Thermometers,
- Graduated cylinders
- Measuring cup

### Tables, Charts and Diagrams:

The way a scientist keeps track of experiment trials.

- At least 5 trials
- Organized in columns and rows
- Must use labels or headings
- Shows Independent variable (what was tested)
- Responding variable (result)

### Types of Graphs to Use to Display Your Data:

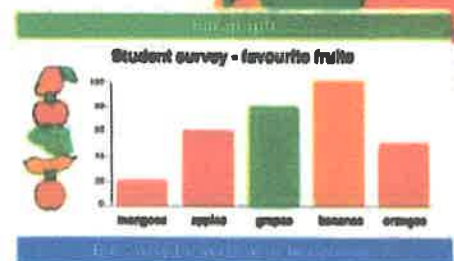
#### Pie Graph

- Percentages of groups
- Pieces add up to 100
- Great for surveys



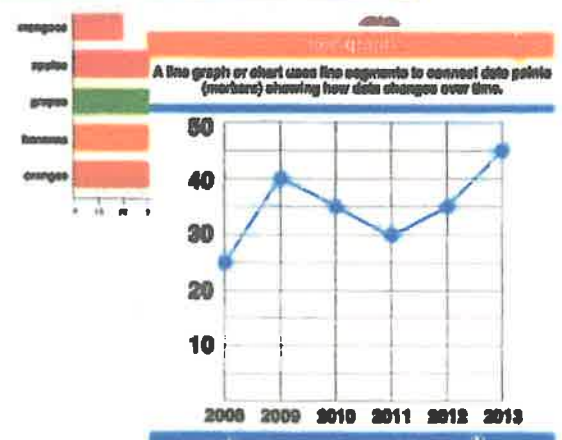
#### Bar Graphs:

- Comparing amounts
- Results at a glance
- X axis (Horizontal)
- Y axis (Vertical)



#### Line Graphs

- Shows change
- X axis (time increments)
- Y axis (measurements)



**...And now back to the Experiment Steps:**

**Sixth: Write a conclusion:** Tell us what happened. Was your hypothesis right, wrong, or neither? Would you change anything about the experiment or are you curious about something else now that you've completed your experiment? **TELL WHAT YOU LEARNED FROM DOING THIS.**

**Seventh: UNDERSTAND ITS APPLICATION.** Write about how this experiment can be used in real life. How will this help in the future? Why was it important to know about this?

**Now It's Your Turn!**

**Materials:**

List the materials that you will need for your science experiment here:  
**(TAKE PICTURES!)**

- |          |           |
|----------|-----------|
| 1. _____ | 6. _____  |
| 2. _____ | 7. _____  |
| 3. _____ | 8. _____  |
| 4. _____ | 9. _____  |
| 5. _____ | 10. _____ |

**Variables:**

List the variables that you will control, the variable that you will change and the variables that will be the results of you experiment:

**My controlled variables are (the things that will always stay the same):**

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**My independent variable is (the things(s) that change(s) from one experiment to the next; or what you are testing):**

---

**My responding variables might be (the results of the experiment):**

---

**Procedure:**

**List the steps that you have to do in order to perform the experiments here  
(Don't forget to take pictures at each step):**

1<sup>st</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
2<sup>nd</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
3<sup>rd</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
4<sup>th</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
5<sup>th</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Design a table or chart here to collect your information  
(Don't forget pictures!)**

**Use graph paper if you need to make a graph of your results from your table.**

### Conclusion:

- What did you learn?
- Did it work? Why or why not?
- Did you confirm your hypothesis?
- What did the results tell you?
- What did you prove?

Sometimes not being able to prove a hypothesis is important because you still proved something.

### Application:

How does this apply to real life?

It is important to know about this experiment because...

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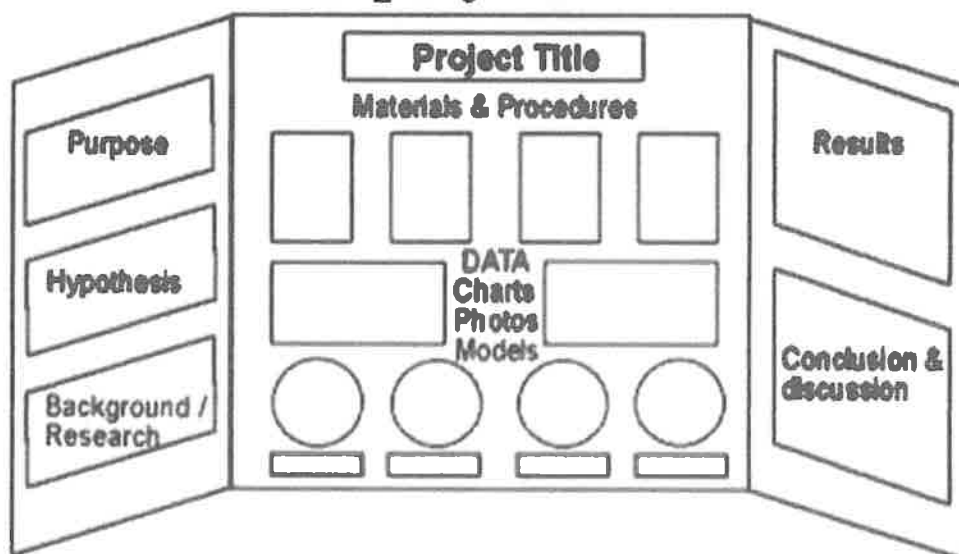
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Suggested Science Board size 48" by 36"

## Display Board



Arrange information so that it is easy to read and flows in a logical order.

Top to bottom and left to right.

### Display Secrets:

- Type information or use best writing
- Use glue sticks or spray adhesive
- Use readable fonts
- No more than two different fonts.
- Place information on colored paper to make it stand out



# Science Fair websites



<http://www.sciencebuddies.org/>

Looking for inspiration for a science fair project? In need of fun, at-home science experiments? Science Buddies has over 1,000 Project Ideas in all areas of science.

<http://school.discoveryeducation.com/sciencefaircentral/>

Separate science fair guides for students, teachers, and parents.

<http://www.all-science-fair-projects.com/>

Science Fair Projects for all levels. We have hundreds of ideas for every science topic, from Astronomy to Zoology!

<https://www.education.com/science-fair/>

*A vast collection of science fair project ideas on popular science fair topics ranging from physics and chemistry to biology and even sociology. We offer free science fair ideas suitable for every grade level.*

<https://www.scholastic.com/teachers/.../teaching.../40-cool-science-experiments-web/>

**These science videos are perfect for teaching basic chemistry and physics concepts and exploring how everyday items work.**

<https://learning-center.homesciencetools.com>

**Science Fair Project Ideas for Elementary School - Find a great elementary science fair project with these project ideas!**

# 200 Science-Project Ideas That Will Wow Judges!

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

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

Read this list of 200 science-fair project ideas.

Circle all of the ones that sound interesting to you.

1. How does the temperature of a tennis ball affect the height of its bounce?
2. How does the air pressure of a soccer ball affect how far it travels when kicked?
3. Does a metal baseball bat vibrate more than a wooden one?
4. How does the weight of a bowling ball affect how many pins the ball knocks down?
5. Which increases your heart rate more: walking up and down real stairs or using a stair-master?
6. How does yoga affect your flexibility?
7. How does fast dancing affect your heart rate?
8. How does humidity affect the curliness of hair?
9. How does a shampoo's brand affect the strength of hair?
10. How does the type of material affect how long a shirt takes to dry?
11. Which nail polish best resists chipping?
12. How does the fat content of cheese affect its stretchiness?
13. How does the length of time that a soda bottle is open affect its fizziness?
14. How does the temperature of water affect the time it takes to freeze into ice cubes?
15. How will the time spent chewing bubble gum affect its bubbles' maximum size?
16. How will adding different flavors of Kool-Aid® to water affect the water's boiling point?
17. Which brand of popcorn leaves the fewest unpopped kernels?
18. Does the flavor of gelatin affect the amount of time it takes to set?
19. How does playing video games affect hand-eye coordination?
20. What is the effect of toothpaste brand on teeth-cleaning power?
21. What brand of paper towel is most absorbent?
22. What brand of trash bag can withstand the most weight before ripping?
23. How does a light bulb's wattage affect the amount of heat detected above a light?
24. Under what color light do plants grow best?
25. Which brand of mouthwash kills the most bacteria?
26. Which brand of breath mint lasts longest?
27. How does the amount of sugar in homemade ice cream affect how fast it freezes?
28. In a blind taste test, can you tell the difference between nonfat, low-fat, and whole milk?
29. When you pour soda out of a newly opened soda bottle, which produces more fizz: regular or diet soda?
30. How does brand affect ketchup's flow?
31. Given the same amount of water, how does pot size affect the amount of time it takes to boil water?
32. Where is the best place to store home-baked cookies to keep them fresh longest?
33. How does the amount of yeast affect how high bread rises?
34. Which cereal brand stays crunchy in milk the longest?
35. Which brand of chocolate bar melts fastest in the sun?
36. Which type of bread turns moldy first: store-bought or bakery bread?



## 200 Science-Project Ideas That Will Wow Judges!

37. How does the type of container affect ice cream's melting time?
38. Which can support more weight: paper or plastic grocery bags?
39. Does the type of animal in a pet-store window affect the number of people who are attracted to the window?
40. Does the color of a terrarium affect a lizard's skin color?
41. Does the brand of kitty litter affect clumping?
42. Does listening to one type of music lower heart rate more than another type?
43. How old does chewed gum have to be before it stops sticking to shoes?
44. Which frozen dessert melts slowest: ice cream, frozen yogurt, or sorbet?
45. How does the tension in a violin's strings affect its pitch?
46. How does the size of a drum affect its pitch?
47. How does a person's age affect his or her flexibility?
48. How does a person's age affect his or her ability to see at night?
49. How does the amount of air in a bicycle's tires affect how long it takes the bike to brake?
50. How does the size of a bicycle's tires affect how far it travels given a specific amount of pedaling?
51. How does hair's curliness affect its strength?
52. How does color affect a person's mood?
53. How does the time of day affect your body's temperature?
54. How does the type of music that a person listens to while exercising affect how hard he or she works out?
55. Does one type of food fill you up faster than another?
56. Which grows faster: fingernails or toenails?
57. Does gender affect lung capacity?
58. If you are right-handed or left-handed, do you also prefer a certain foot?
59. Does the surface of a tennis court affect the height that a tennis ball bounces?
60. Does the time of day affect your flexibility?
61. How does air temperature affect your flexibility?
62. Does a no-name stain remover work just as well as a brand name?
63. Which is a better insulator: wool, cotton, or down feathers?
64. How do various ski waxes affect the amount of friction between the ski and the snow?
65. Does playing Sudoku puzzles improve your performance on other types of puzzles?
66. How does shutter speed affect the color of a photograph?
67. How can you speed up the ripening of tomatoes?
68. What effect does watering have on how fast a plant grows from a seed?
69. How does gravity affect the direction of a plant's growth?
70. Do all plants seek out light?
71. How does the weight of a paper airplane affect its ability to fly?
72. How does a parachute's material affect the speed at which it falls?
73. How does the anticipation of a tickle affect you?
74. How does the weather affect your mood?
75. Which type of soap removes more grease: dish soap, hand soap, or shampoo?
76. Which type of fruit is more acidic: lemons, oranges, or watermelon?
77. What type of ground layers limit erosion most: sand, gravel, or soil?
78. How does the speed of a river's current affect the size of the grains on the riverbed?
79. How does the type of music played in a store affect the number of purchases made by customers?
80. In what type of lighting does a plant grow best?
81. What difference do low-phosphorous fertilizers have on a lake's pollution levels compared with standard fertilizers?

## 200 Science-Project Ideas That Will Wow Judges!

82. How does the type of seed in a birdfeeder affect the types of birds that the feeder attracts?
83. What types of flowers attract the highest number of butterflies?
84. Which brand of potato chips has the least grease?
85. How does the material of a bandage affect its ability to stick after getting wet?
86. How does the time of day affect levels of algae in a lake?
87. How does tire pressure affect a car's fuel efficiency?
88. How does the amount of air in a balloon rocket affect how far it flies?
89. How does the type of string used in a "can and string" phone affect the phone's ability to transmit sound?
90. Does one cell-phone carrier get better reception than other carriers?
91. Do "triple roll" toilet paper rolls really last three times as long as regular rolls?
92. Are rooms with carpeted floors noisier or quieter than rooms with wooden floors?
93. How does humidity affect how often a plant needs to be watered?
94. Can people tell the difference between music played on an MP3 player, CD player, tape player, and turntable?
95. How does temperature affect the growth of mold?
96. How does meditation affect your heart rate?
97. Which has a longer life: an LED or an incandescent light bulb?
98. Is the incidence of asthma in a region related to the area's level of air pollution?
99. How does the color of a shirt affect the amount of heat it absorbs?
100. How does the amount of daylight that enters your room affect how late you sleep?
101. How does the type of stuffing in a pillow affect its fluffiness?
102. How does the time of year affect the number of hours of daylight in a 24-hour period?
103. How does the magnification of binoculars affect how far you can see?
104. Do all chocolate candies have the same melting point?
105. Do different types of onions make your eyes tear up more than others?
106. Which is better at cleaning mold and mildew: vinegar or commercial cleaning agents?
107. Does maple syrup's "grade" affect its flow?
108. Do different brands of batteries last longer than others?
109. Which uses more water: a shower or a bath?
110. Which type of cup will keep a hot drink warm longer: paper, plastic, Styrofoam, or glass?
111. Do natural mosquito repellants keep more mosquitoes away than artificial repellants?
112. How do gas stations affect the soil around them?
113. Which cleans teeth more effectively: baking soda or toothpaste?
114. Does the length of a clock's pendulum affect its period?
115. Which holds hair in place for a longer period of time: gel or hairspray?
116. Does listening to music while studying affect your performance on a memory test?
117. Does a person's height affect his or her ability to successfully make a jump shot in basketball?
118. How much trash do you keep out of a landfill by recycling paper and plastics?
119. Which type of photos do people hold on to longer before making prints: digital or film?
120. Do mood rings accurately predict a person's emotions?
121. Is a person's favorite subject in school influenced by gender?

## 200

Science-Project Ideas That  
Will Wow Judges!

122. Does the weight of a baseball bat affect how far the ball goes when it is hit?
123. Does the temperature of a hockey puck affect how far it will travel when struck by the stick?
124. Do girls spend more time talking on the phone with friends than boys?
125. How does the type of food dispensed in school vending machines affect the eating choices that kids make throughout the day?
126. Which type of fertilizer helps plants grow taller?
127. Which has a better chance of survival: grass that was planted as seed or sod?
128. Is there a correlation between gender and the number of push-ups that a person can do?
129. Do best friends have the same favorite color?
130. Who buys from the "sale" rack more often: kids or adults?
131. Are kids more likely to be influenced by ads that feature other kids or by ads that feature adults?
132. Does the amount of time a student spends watching TV affect his or her grades?
133. Does the length of a surfboard affect its stability?
134. Which stays fresher longer: organic or nonorganic fruit?
135. Does a person's age affect whether he or she goes to the Internet, radio, TV, or newspaper for news?
136. Which stains dentures more: coffee, soda, or grape juice?
137. How does the temperature of a pool's water affect the speed at which a swimmer swims?
138. Does the use of flippers help a person swim faster?
139. Do you wake up feeling more alert when you awaken to an alarm clock that buzzes, plays music, or plays nature sounds?
140. Does the size of a dog determine how high or low-pitched its bark is?
141. Does your cat prefer one brand of food over another?
142. Can blindfolded people tell the difference between bottled water and tap water?
143. Is there a relationship between people's age and the amount of time they can hula hoop?
144. Do objects float better in freshwater or in salt water?
145. How does a person's age affect reaction time?
146. How does caffeine affect people's heart rate?
147. Do some materials conduct heat more than others?
148. How does the roughness of sandpaper affect its ability to smooth various surfaces?
149. How does increasing the height of a ramp affect how far a ball rolls down the ramp?
150. How does the strength of a magnetic field vary with the magnet?
151. Can people identify their pet dog by the sound of its bark alone?
152. Do people who exercise regularly have a greater lung capacity?
153. Can people use their sense of hearing alone to tell apart a penny, nickel, dime, and quarter?
154. Do left-handed people prefer the same school subjects as right-handed people?
155. Does the type of liquid in a glass affect the pitch of the note that results when a person rubs the rim of the glass?
156. Does the length of a wind chime affect its pitch?
157. Do people who live in rural areas name constellations correctly more often than people who live in cities?
158. Does weather affect satellite-TV reception?
159. Do girls and boys talk about the same topics as each other when they hang out with their friends?
160. Does the length of a bat affect how far a baseball will travel?

## 200

Science-Project Ideas That  
Will Wow Judges!

161. Does your dog prefer water directly from the faucet or tap water that's been refrigerated?
162. How often can people accurately tell if someone is happy, sad, or mad just by looking at the person's eyes?
163. How often can people correctly determine if a person is left-handed or right-handed just by looking at the person's handwriting?
164. What melts ice the fastest: sand, cat litter, or mineral rock salt?
165. Does temperature affect the growth rate of shoots on a potato?
166. Which type of container traps the most heat: a shoebox covered in aluminum foil, plastic wrap, or wax paper?
167. How does the shape of a boat's hull affect its speed?
168. How does water pressure vary with depth?
169. Which best helps prevent soil erosion on a slope: plants, rocks, or mulch?
170. Does one brand of antacid neutralize acids faster than another?
171. Do gym shoes have more bacteria than sandals?
172. Does sunlight fade the paper more in books or in magazines?
173. In which room of the house do plants grow the highest?
174. Which toothbrushes last longest: ones with natural or nylon bristles?
175. Which air freshener lasts longest?
176. Do mildew-resistant shower curtains really keep mildew away longer than regular shower curtains?
177. Does a person's weight vary throughout the day?
178. Do certain bicycle helmets hold up better after an impact than others?
179. Can you skate faster with in-line skates or roller skates?
180. Do thunderstorms happen more often in the afternoon than in the morning?
181. Does bread stay fresher longer when it is kept in the refrigerator or on the counter?
182. Which kind of gum keeps its flavor longer: sugar-free or regular?
183. Which lightens stains better: vinegar or lemon juice?
184. Which type of bread toasts fastest?
185. Do bigger lemons have more seeds than smaller ones?
186. Does squinting improve your vision?
187. Do fans really make you cooler or do they just make you feel like you're cooler?
188. Do taller people take longer strides than shorter people?
189. Can you judge depth as well using just one eye than using two?
190. Does your "handedness" have any relation to which eye is stronger?
191. Does exercise increase or decrease your energy level?
192. How does your sight affect your balance?
193. Which do people prefer: a booth or a table toward the middle of a restaurant?
194. Do plants inside a mall grow faster under artificial light or under a skylight?
195. Does listening to rock music make you eat faster than listening to classical music?
196. Does eye color affect how well a person sees?
197. Does toothpaste with whitener whiten teeth more than regular toothpaste?
198. Does washing your hands reduce the amount of bacteria on them more than not washing?
199. Does using conditioner leave your hair with fewer knots than not using conditioner?
200. Does hair take longer to dry when using a hair drier or when it dries naturally?

Now, reread all of the questions that you circled. Do these questions have anything in common? If so, what?

Look at your answer above. If the questions you circled have anything in common, you probably have a strong interest in that topic. You might want to think about doing a science-fair project on that topic.



## Andersen Elementary Science PROJECT REGISTRATION

Dear Andersen families,

Please read the Science Fair Planning Guide prior to completing this form. Registration for the Andersen Science Fair can now be done [online](#) through Andersen Elementary webpage or the Andersen enewsletter. Registration can also be completed by filling out the following form and returning to your teacher. Due date is **Friday December 13th.**

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### Andersen Elementary Science Project Title/Question

**Due Date: Friday December 13th**

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

Grade: \_\_\_\_\_

Classroom Teacher: \_\_\_\_\_

The question/title I have chosen is:

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Parent/Guardian Signature: \_\_\_\_\_