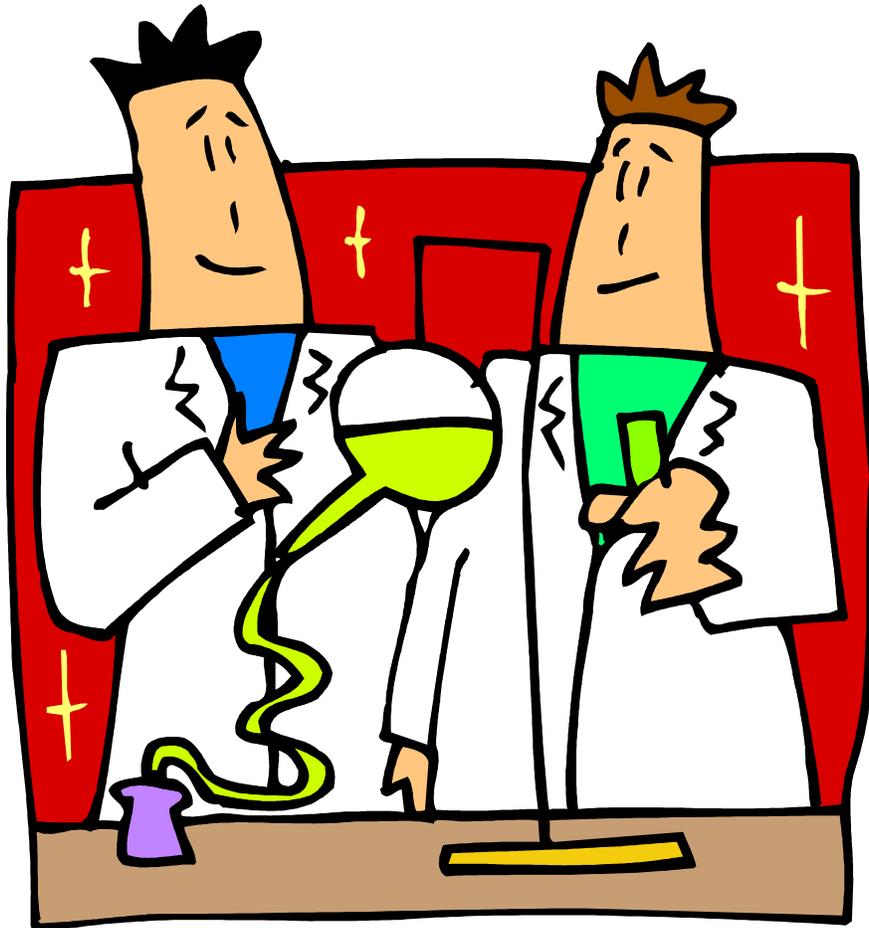


Highlands Elementary



Science Fair Guidelines

Science Fair Projects

The grading of your science fair project will be based on neatness, organization, attention to detail, and completeness. Below are some things to consider when planning your project.



DO

an original experiment

all of your own work

follow the Scientific Method

use a colorful 3 sided backboard

use correct spelling!

use a computer for written work when possible

all handwritten work must be in pen or fine marker with large size print

include diagrams, photos or pictures

DON'T

no volcanoes

no mold experiments

no Solar System models

no electric circuit light bulbs

no electric circuit buzzers

no plants with food coloring

no cut up cardboard box backboards

no reports

no pre-packaged experiments

no animals



Backboard Requirements

All backboards should be two fold with three sections.

Normal backboard dimensions are 36" H x 48" W when flat.

Include Title, Question, Hypothesis, Procedure, Results and Conclusion on the backboard.

Use construction paper to frame your writing and pictures.

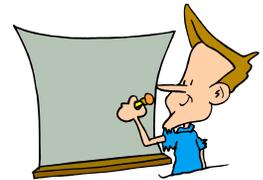
Type all information if possible.

If your information is not typed use printing so it is legible.

All information must be included on the backboard.

Backboards will be available for purchase at school

Be creative and have fun!

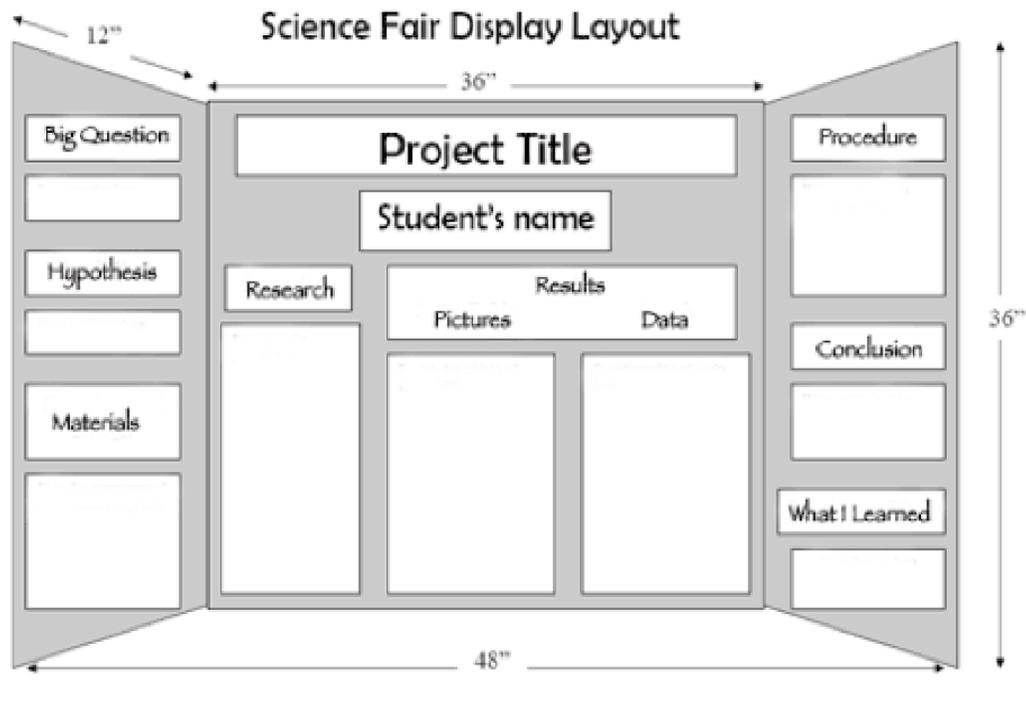


Grading

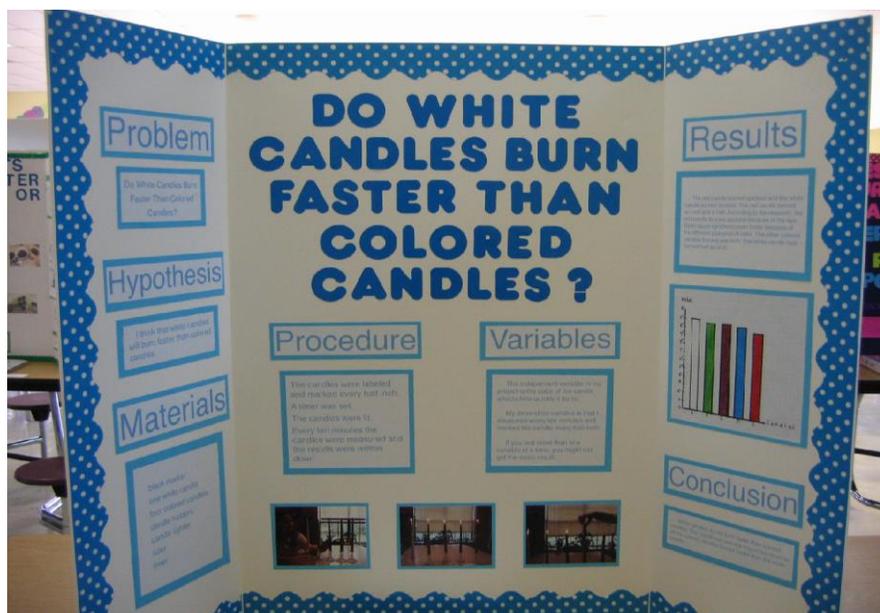
Your science fair project will be graded on a hundred point scale

On time	5 points
Presentation.....	10 points
True Experiment (not a model or report).....	10 points
Title/Question/Hypothesis.....	5 points
Procedure (in detail, and complete sentences).....	15 points
Results.....	20 points
Conclusion.....	20 points
Backboard.....	5 points
Spelling/Grammar.....	10 points
Total 100 points	

SCIENCE FAIR PROJECT BOARD



Here are some samples to help you with your display board. This is your final presentation, make sure your effort is rewarded by taking your time and presenting the information correctly.



IDEAS FOR EXPERIMENTS

Animal Studies

Do ants like cheese or sugar better?

Does holding a mirror in front of a fish change what a fish does?

What color of birdseed do birds like best?

Do mint leaves repel ants?

On which surface can a snail move faster-dirt or cement?

Does an earthworm react to light and darkness?

(All animal studies must be pre-approved by your teacher)

Comparative Studies

What kind of juice cleans pennies best?

Do watches keep time exactly the same?

How does omitting an ingredient affect the taste of a cookie?

Do suction cups stick equally well to different surfaces?

Which videotape maintains the best picture for the greatest amount of use?

Which home smoke detector is most sensitive?

Consumer Testing

Which paper towel is the strongest?

With which type of battery do toys run the longest?

Which brand of popcorn pops the most kernels?

Which brand of diaper holds the most water?

What type of oil has the greatest density?

Which type of sunglass lens blocks the most light?

Which materials keep ice cubes from melting for the longest time?

Human Studies

Can you tell the precise time without a watch or clock?

Is using two eyes to judge distance more accurate than using one eye?

Do boys or girls have a higher resting heart rate?

Human Studies (cont.)

Do taller people run faster than shorter people?

Does the human tongue have definite areas for certain tastes?

Do children's heart rates increase as they get older?

Does heart rate increase with increasing sound volume?

How does coffee affect blood pressure?

Plant Studies

Can plants grow without soil?

Does temperature affect the growth of plants?

Do different kinds of apples have the same number of seeds?

Does the color of light affect plant growth?

Does it matter in which direction seeds are planted?

How does light direction affect plant growth?

Physical Sciences

Can the design of a paper airplane make it fly farther?

Do all objects fall to the ground at the same speed?

Will more air inside a basketball make it bounce higher?

What kind of glue holds two boards together better?

Does the width of a rubber band affect how far it will stretch?

What gets warmer faster-sand or soil?

Does the color of a material affect its absorption of heat?

Does sound travel best through solids, liquids or gases?

Water

Which materials absorb the most water?

What materials dissolve in water?

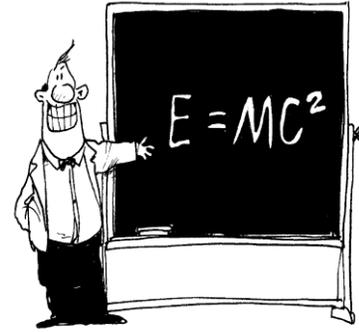
Does baking soda lower the temperature of water?

Does the color of water affect its evaporation?

Can you separate salt from water by freezing?



Scientific Method Explained



Title

What is my experiment about?

Question

What do i want to find out?

Hypothesis

What do I think I will find out? A hypothesis tells you what data to look for and what it will mean when you find it.

Procedure and Materials

Materials - always begin an experiment with an exact list of materials. Keep an accurate record of what kind and how much of a material is used.

Procedure - list step by step how the experiment was performed. Your instructions should be so complete that your experiment can be replicated by anyone who can read.

Results

What actually happened? Results should include observations down to the very finest detail. Include what you see, hear, smell, taste and touch as appropriate.

Conclusion

What did I learn? This is where you get the chance to share your new scientific knowledge. Use science vocabulary to help you define what principals and/or properties were exhibited in your experiment.