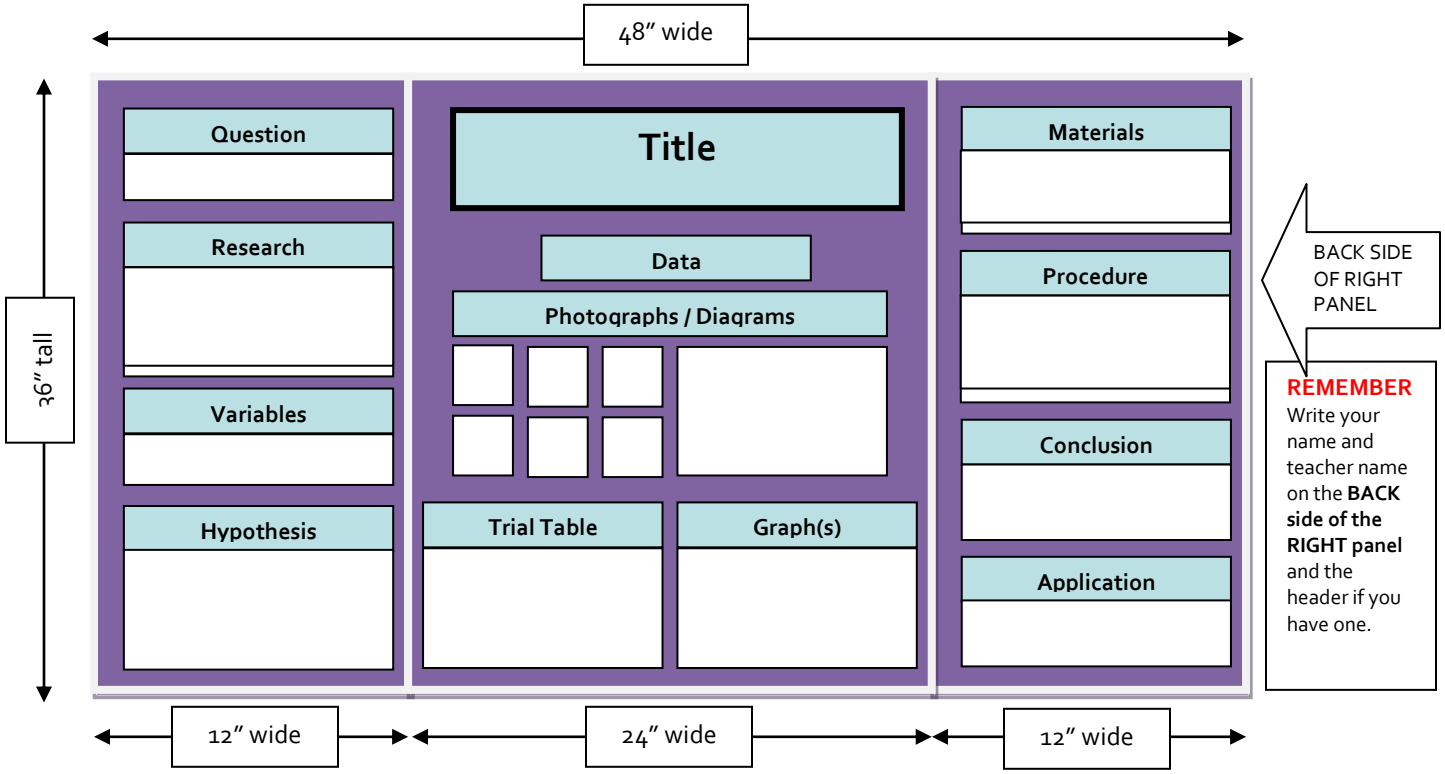
Science Fair Display Board Layout



For your science fair project, you need to prepare a display board to communicate your work to others. In most cases you will use a standard, tri-fold display board that unfolds to be 36" tall by 48" wide. This size will provide you enough space to display all the required work. Individual display boards cannot be larger than 36" x 48", but they may be smaller. Display boards must be free standing. Projects displayed on poster board will not be accepted.

Organize and label your information like the example above so that your audience can quickly follow the thread of your experiment. Include each step of your science fair project; this shows that you used the scientific method. You can use the labels provided by your teacher or create your own using the computer.

- LEFT panel –Question (also known as testable question), Research, Variables, and Hypothesis
- CENTER panel – Title and Data (photographs, diagrams, trial table(s), and graph(s))
- RIGHT panel – Materials, Procedure, Conclusion, and Application

Very Neat Text It has to be neat, but it does not have to be typed. Type your text or print it neatly. Make your text large enough so it may be read from 2 feet away, **font shouldn't be less than 16 points**. Remember to **proof read all your text** before printing. The title should be big and easily read from 10 feet away. Choose a title that accurately describes your work, but also grabs people's attention. You may use stick-on letter or other crafty materials to spell out your project title - **NO FOOD ITEMS** (perishable materials) are allowed such as candy, cereal, chips, gum, popcorn, cookies, etc. (consult your teacher)

Attaching Text **Do not glue down anything until you are certain everything fits neatly**. Follow display board layout example above. Before you glue anything down, lay out all your labels, text, pictures, tables and graphs on the board. Make sure you have enough space, avoid clutter but be creative with the placement. If you have large amounts of text for components such as research, materials and procedure, remember that you may layer text pages one over the other like a flip book – refer to your mini mock display board sample. Keep it clean, organized and eye-catching. Use glue or clear tape, **NO protruding staples**, or pushpins. **All corners must be glued or taped down**, and make sure glue or tape is not visible.

Appealing Colors Use colors that are appealing and complimentary. They should contrast with your board color. Try not to use more than 3 different colors (this includes your board color). If you have a white board, back your text with colored paper to create a neat border that accentuates your text. If you use markers, crayons or colored pencils, please color neatly and avoid smudges.

Display Board Checklist

Student Name: _____ **Teacher:** _____

Project Title: _____

Use this rubric to check (self-evaluate) how the component of the project is displayed.		Unsatisfactory	Satisfactory	Excellent
DONE	**Does the display board include the following?**	**No Evidence**	**Some Evidence**	**Clearly Evident**
✓				
	Follows Science Fair Display Board Layout See backside of this checklist			
	Labels Student and Teacher Name Please label the names on the BACK side of the RIGHT panel			
	Title / Should be easy to read from 10 feet away and grab people's attention			
	Question / also known as Testable Question or Problem Statement Must be a cause and effect question / Don't forget the question mark			
	Research Includes vocabulary definitions, questions with answers, and bibliography			
	Variables (optional - *only if student opted to complete for extra points ☺)* Must list independent, dependent and controlled variables			
	Hypothesis Must be written in one of these two formats: • "I think … will … because according to my research/experience …" • "If … then … because according to my research/experience …"			
	Materials / Written in list form using "bullets" / Include amounts and units of measurement			
	Procedure / Written in step-by-step form, with each step numbered			
	Data Includes trial table, graph(s), photos, diagrams - all properly labeled • **Trial Table(s)** – must contain the quantitative or quanlitative results for a minimum of 3 trials and the averages / must have a title / must identify the unit(s) of measurement • **Graph(s)** (*if applicable because some **qualitative** data can't be displayed in a graph*) - must be appropriate type of graph to display the averages in the trial table / must have a title / label both axis ("x" is horizontal & "y" is vertical) / include units of measurement / label the key • **Photos** – must show what happened during the experiment (cause and effect) / each photo must have a caption describing what it is or what is happening / no identifiable faces are allowed from student scientist, adult(s) or volunteers • **Diagram(s)** (*if applicable*) - must be clear and easy to read	Trial(s) Graph(s) Photos Diagram(s)		
	Conclusion Must state if data supports or doesn't support your hypothesis / must restate the hypothesis / provide data as evidence to support statement			
	Application (optional - *only if student opted to complete for extra points ☺)* How can you apply (use) what you have learned to a real life situation? Who could benefit from the information in your project, and why?			
	Neatness No grammatical errors / legible text (style and size) / no pencil lines, clutter or smudges / no loose corners / no visible tape or glue / no perishable food			

BOUNCE DYNAMICS

Question

Does changing the type of ball (golf ball, tennis ball, baseball, ping-pong ball, and foam ball) affect the height of the bounce when dropped from 1 meter high?

Research

Balls are suited to the games that we play with them. A change in the bounciness of a ball can drastically affect a game. When you drop a ball, gravity pulls it toward the floor. The ball gains energy of motion, known as *kinetic energy*.

(continues)

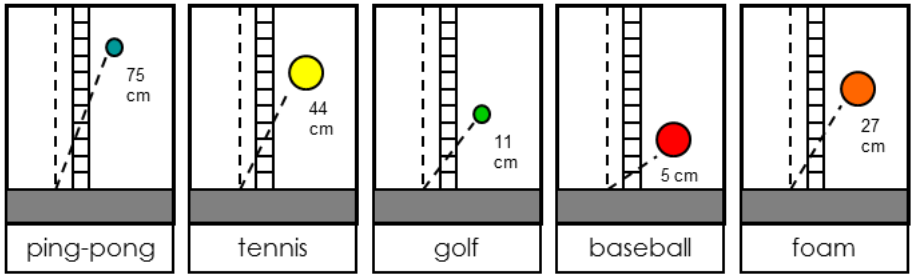
Variables

Independent: type of balls
Dependent: height of bounce
Controlled: height of drop; surface

Hypothesis

I think the ping-pong ball will bounce highest because based on my experience and research it is the lightest of the five balls and it is designed to bounce.

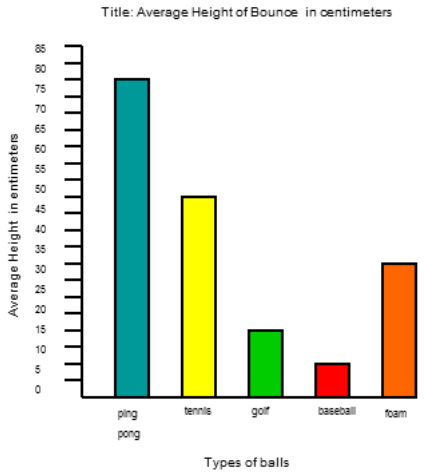
Data



Table

Type of Ball	Height of Bounce (in cm)				
	Trial 1	Trial 2	Trial 3	Trial 4	Average
ping-pong	75	74	76	75	75
tennis	42	47	45	42	44
golf	10	11	12	11	11
baseball	5	5	5	5	5
foam	28	26	27	27	27

Graph



Materials

- 5 balls (golf, tennis, baseball, ping-pong, and foam ball)
- 1 tape measure
- 1 pencil
- 1 notebook
- 1 hard flat surface (tile floor or desk top)
- 1 partner

Procedure

1. Drop each ball from the height of 1 meter on to a hard flat surface.
2. Measure the height of each ball's first bounce (measure from the bottom of the ball).
3. Repeat steps 1 and 2 four times for each ball.
4. Average the four trials for each ball.

Conclusion

My data shows that when a golf ball, a tennis ball, a baseball, ping-pong ball, and a foam ball are dropped from the same height, the ping-pong ball bounces highest. The data supports my hypothesis.

Application

One application for the knowledge I acquired from this experiment would be discovering the best ping-pong ball by testing their bounciness and sharing the results with my ping-pong club.