

Previous Projects

I have included previous 506 projects to help encourage you develop ideas for your project. The first few are from recollection only and the details are a little vague.

Response	Factors	Comments
Flakiness of Pie Crust	Shortening, Pie Plate	Response was tricky to define
Time to Exhaustion	Exercise Drink, Machine Level, Age	Well-designed experiment found a strong treatment effect
Club distance	Golf ball, Length of Iron	Noisy response
Tuning of Clarinet	Reed, Note	
Yeast Volume	Water Temp, Time, Sugar	Worked at Pizza Hut
Jump Rope Pulse Rate	Method, Tempo	
Reservoir Fill Time	Pump Type, Inlet Pipe Diam., Outlet Pipe Diam.	Family Farm in Oman
Alfalfa Sprout Biomass	Soak Time, Watering Regimen, Handling	
Holding Strength of Wall Putty	Shape, Surface, Amount	Shape was important—I had asked them to throw it out
Overhead Shot Put distance	Foot position, Push off, Stance width	USC shot putter
Pneumatic launcher distance	Force, Object Weight, launch tube length	Genius kid brother's science fair project
Stock Car Racing Lap times	Restrictor plate, Car model, Series	NASCAR intern
Concentration of expressed protein	Supplier of culture medium, container size, incubation time	
Pin circle diameter	Magnification, light source, cap orientation	Hitachi employee
Methane Adsorption	resorcinol/formaldehyde ratio, weight percent solids	
Soccer goal kick	Side of field, ball design, type of kick	A little noisy, even for an experienced player
Housing starts	County, interstate access, lake access, urban/rural	
Basketball field goal percentage	Shooter, dribble/pass, movement, shooting sequence	
Command psychiatric referrals	Gender, comfort, previous history	Used survey responses as factors
Pool shooting percentage	Bridge, cue position	a level cue stick is very important
Recruiting success	stress, well-being, type A behavior	Psychological tests were used as factors
Percentage of lighted rooms	Building, time of week, time of day, room type	
Clarinet tuning	reed size, reed brand, note	
Sprinkler distribution	water pressure, diffuser, height	Required much preliminary experimentation
Product recall	Color/BW, graphics/text, ad size	Good marketing project
Fuel Cell Efficiency	Temp., Pressure, Oxy/Air	
Potato Gun	Angle, Pressure, Size	Used No. of skips over water as response
Compressive Strength of Previous Concrete	Aggregate shape, Porosity, Cure Time	
Nontoxic insecticides	Oil, Soap, Tobacco	Used percent cricket fatality in 5 minutes as response
Purse Sales	Day, Dress, Market	Students was employee at Belk's