



18

## Leonardo Da Vinci's 1<sup>st</sup> Annual Parachute Contest

Object of the contest is to drop an egg suspended in a parachute down approximately 30 feet onto a padded target without breaking the egg.

The Parachutes will be judged on two components, accuracy, and speed.

Accuracy- closest to the center of the target.

Speed- parachute that doesn't break the egg.

Egg will be provided in a zip lock baggy with a limited amount of padding.

Prizes will be giving for 1<sup>st</sup> and 2<sup>nd</sup> place.

## The World of Flight

Everyone is fascinated with flight the fact that they can get a plane that weighs more than several busses combined in the air is mind boggling. Leo's world of flight has to be interactive as well as informative. We can achieve this by teaching them concepts then allowing them to explore those.

### Model airplanes

Rubber band powered planes could be built in a lab.

Paper airplanes could help teach the idea of gliding.

### Leo's Helicopter

A stationary helicopter blade that measures lift as the pitch is changed by the patron would allow the guests to play with pitch and lift.

Include information like this blade would have to spin 1000 times per-minute to lift 5 pounds or a blade this big would only have to spin 800 times per-minute.

Match Leo's helicopter to today's (the idea of lift)

Flight simulators are always fun, and can be inexpensive.

Air Force

## Mirror Writing

Leo wrote in code, how hard is it to mimic this code.

Back-ward writing board

Computer can very easily reverse writing.

## The Human Anatomy

Leo dissected cadavers whenever he got the chance. This might lend itself to a section of the museum where guests would have the chance to see how the body is put together, and how it works.

Comparison between the drawings and the real thing

Computer program, to allow the user to explore any part of the body.

Computer dept at the University

Chris Johnson (801)587-9825

Greg Jones (801)581-5021

3D holograms of the body

Voxel

Danny Burman (801)583-5970

## Leonardo's Parachute

Leonardo Da Vinci was very fascinated with the idea of flight. He designed the first parachute, but never got the chance to develop it. To help teach patrons at the "Leonardo" I thought it would be neat to allow the patrons to play with parachutes.

Parachute designs over time.

Parachute material changes.

[www.parachutehistory.com](http://www.parachutehistory.com)

Parachute dropping contest, annual egg contest.

Doug Wagstaff Cottonwood High School

Nov 27<sup>th</sup> at 9:00am

Prize—cash prize, check on skydiving prize.

Test how it would feel to use a parachute.

US Marine Corps Sgt. Harris (801) 954-0418

NAVY Michael Daly (801)977-1115

Parachute Manufacturers

SKYDIVING parachuting magazine website

## Leo's Weapons

While Leonardo Da Vinci lived in Milan he was contracted to design certain weapons of war. The best way to learn about weapon design and the theory behind the design is to play with them. At the "Leonardo" patrons will have the chance to shot a catapult, or fire a crossbow, and understand how and why the simple machine works.

How his weapons work

What other armies were using

A brief history of weapons

The catapult ally

Professor Meek didn't seem to help

Professor Roemer

Professor Lightly 581-6911

Catapult contest science on wheels does?

Fun facts, like if a rubber band could shoot gum wrapper 10 feet then a catapult could shoot a dead horse x yards.

Trajectory

Video camera filming the catapult

Computer game designed to teach trajectory

Catapult kit contest in the lab

Give the patrons the chance to experiment with a catapult

Cross bow

Cross bow shooting next to the catapult to see the differences.



University hospital  
Kurt Albertine

(801)581-5021

[kurt.albertine@hsc.utah.edu](mailto:kurt.albertine@hsc.utah.edu)

## Morph Mona Lisa

Nothing is more fun than playing with photos, and this would allow patrons to see what they would look like if they were morphed with Mona Lisa.

Looking at different computer programs

Prof. Rabbit?

Morphing software

[www.morphexussoftware.net](http://www.morphexussoftware.net) ←

Collage creation