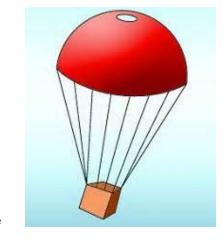
## **Fourth Grade Science Fair Project**

Parachutes: A parachute is a device used to slow down an object's fall

**Design Criteria:** The goal is to have a stable parachute flight, avoiding oscillating, and a fully opened canopy for maximum lift and smoothest descent.

## **Parachute Variables:**

- Canopy Shape
- Length of Suspension Lines
- Number of Suspension Lines
- Vent Holes
- Canopy Size & Surface area (calculated by finding the area of the canopy)
- Weight of Payload



PURPOSE	Choose a question. Examples are: Which Parachute works most
(This is the question	effectively? Slowest? Carries greatest weight? Prevents breakage of
to the experiment.)	the payload?
PROCEDURE	Choose a Parachute Variable to test.
	Only one experimental variable should be changed & tested at a time.
(This is the list of	Students build three parachutes, or more, varying one of the variables
steps	at a time and then record the descent time of each for comparison.
In this experiment)	
MATERIALS	Collect materials needed for experiment: Timer, Payload (weights,
(List or drawing of	beans, uncooked egg, uncooked pasta), Suspension lines (Strings,
materials)	Cord, Fishing line) Canopy material (Paper, Newspaper, Plastic,
	Cloth, Burlap)
HYPOTHESIS	Make a Hypothesis before experimenting. Examples are: I think the
(Educated guess to	parachute that will be able to carry the heaviest weight and land with
what might happen)	the least damage to the payload is
	I think the parachute that will take the longest time to descend is
OBSERVATIONS	Experiment and collect data:
(Actual data)	A table or chart of the time of descent of varying parachutes
	Pictures taken during the experiment.
CONCLUSION	Write a Conclusion.
(Answer to the initial	My experiment proved that the best parachute is
question)	Parachutes are important because
	The test was a fair and controlled experiment because