



Science Team Challenge-2009

"Exploring the world God has placed us in!"

"STC" EVENT LIST

Below is a list of the "STC" events. A brief description follows the event along with some of the science topics that are included in the events. The science topics will be useful when teams in sixth – eighth grade design their **tabletop displays**. A more detailed list and description will be on the St. Paul's website by Tuesday, March 10th.

STC Event	Description	Science Topic(s)
Reflection Relay	Using mirrors teammates pass a beam of light to each other and on to a target. Speed counts-	Reflection, Optics, Lasers
Rubber Band Cannon	Teams use an adjustable "cannon" to launch rubber bands to targets for points.	Elasticity, Potential Energy, Force, Projectiles
Grab a Gram	Teams use estimation skills to match given masses (g).	Metric system, Density, Volume, Weight vs. Mass
Aerodynamic Airplane	Teams will construct a flying machine that is self-propelled. Distance is the goal-	Aerodynamics, Flight, Projectile Motion
Large Barge	Teams are given a piece of aluminum foil to construct a floatation device that will carry a load.	Buoyancy, Displacement of Water
Projectile Motion	Teams will attempt to place a paper projectile in a parabolic path into a downrange target using a launching device. Points for accuracy-	Projectile Motion, Potential vs. Kinetic Energy
Orienteering	Teams will navigate a numbered course using metric length measurement and directional skills to correctly find the final position. Points earned along the way-	Metric System, Map and Compass
Egg Drop	Teams will construct a cage from given supplies that will keep a raw egg from breaking as it is dropped from a height. Accuracy is also a scoring factor-	Collisions, Force, Gravity
Slow Roll	Teams will use PVC tubing to move a marble from a height to the floor at the slowest speed possible. More points for a slower roll to completion-	Potential Energy, Kinetic Energy, Rotational Forces, Friction, Gravitational Acceleration
Straw Tower	Teams will use straws to build a tower with as much height as they can. The tower must also support a tennis ball at the top pinnacle. Points for height and strength-	Architecture and Design, Truss Construction
Stack It Up	Teams will use small wood planks to build a cantilever. The wood may only be adhered to itself using gravity and friction. Points earned for cantilever length-	Gravity, Center of Mass, Friction

Parent Signature: _____ Date: _____

(5 points)

Student: _____ Date: _____