## Marshmallow Mania

"It's a bird! It's a plane! No, it's a marshmallow!

**CHALLENGE:** To create a catapult from a standard mousetrap that will deliver a small marshmallow to a target area.

## **COMPETITION RULES:**

- 1) You will be provided with a standard spring mousetrap in addition to a limited amount of other supplies. You will receive ONLY ONE SET of materials! You may use all or part of <u>your</u> materials. You may not share your materials with another member. Scissors will be provided by Mrs. Trimpe.
- 2) Everyone will be allowed 30 minutes to **build** and **test** their devices! Competitors are allowed to bring diagrams to help them build their device. At the end of that period, all devices will be impounded and no changes will be allowed! If the device falls apart during competition, you will be allowed 5 minutes to make repairs with your remaining materials, but you cannot change the basic design!

Other Possible Materials:
Rubber bands (3 - 5)
Tape (100 cm)
String (100 cm)
Index cards (2 - 3)
Wooden sticks (2 - 3)
Plastic straws (3 - 5)
Sheet of paper (8.5 x 11)

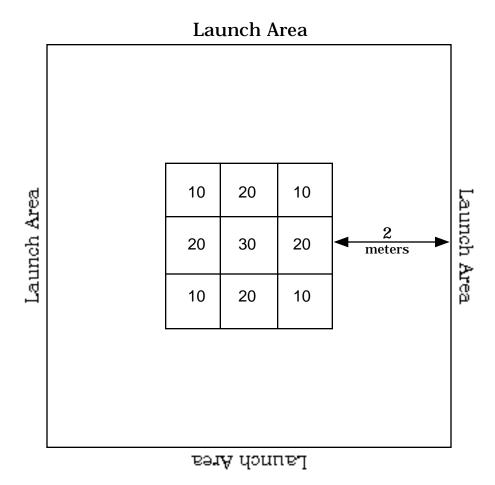
Keep in mind that you will not get everything listed! Be ready for anything!

- 3) The marshmallow must be launched using energy from the mousetrap's spring. The marshmallow cannot be launched with the rubber band or a "helping hand". You may choose to hold the device during the launch or lay it on the floor. You will be provided with a stick to release the mousetrap to save your fingers!
- 4) You will have a total of 3 launches to <u>place</u> the marshmallow in one of the scoring areas. Scoring areas will be worth 10 to 30 points. Competitors may stand at any location around the perimeter of the launch area. A diagram of the launch area has been provided on the back of this page.

## **SCORING**:

Marshmallows will be scored based on landing position. The marshmallow must land in a scoring area to receive points. If the marshmallow lands outside the scoring area, it will receive a zero score. The person with the <u>highest overall score</u> at the end of three launches will be declared the winner! In case of a tie, members will be allowed one more launch. The person with the highest score on the tie-breaking launch will be the winner.

## Launch/Scoring Area Diagram



Competitors and their device must be behind the launch barrier. Members may launch from any location around the perimeter!

N/1 11		- 4
Marshmallo	w Mania Score She	eet
Name	Number	
Launch 1: Launch	ch 2: Launch 3:	
Average =	Best =	
Marshmallo	w Mania Score She	eet
Name	Number	
Launch 1: Launch	ch 2: Launch 3:	
Average =	Best =	
Marshmallo	w Mania Score She	eet
Name	Number	
Launch 1: Launch	ch 2: Launch 3:	
Average =	Best =	
Marshmallo	w Mania Score She	eet
Name	Number	
Launch 1: Launch	ch 2: Launch 3:	
Average =	Best =	