**Iona Prep Pinewood Derby Rules**

Revised 12/06/19

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**Eligibility of Contestants and Cars**

* The Competition is open to all Iona Prep Honors Physics Students, competing in teams composed of up to 3 people. In the event of an absent team member, the other team members may still compete. In the event of an entire team being absent, the car may be raced by proxy. All cars must be present and checked in by the close of registration to race. No cars will be accepted late.
* Cars MUST be constructed using the wood block, wheels and axles provided by your instructor. No previously designed cars or purchased cars may be used.
* Motors, engines, or other propulsion may not be used.

**Car Dimensions**

* Maximum overall width (including wheels and axles) shall not exceed 2-3/4"
* Minimum clearance between the bottom of the car and track shall be 1/4” to avoid damage to the track. This includes any weights added to the bottom of the car.
* Maximum length shall not exceed 7"
* Maximum height shall not exceed 2-3/4"
* The wheelbase (distance between the front and rear axles, center to center) may not be changed from the kit body distance of 4-3/8".
* The Minimum Front Nose Width should be at least 1/2" and parallel with the front axle. Failure to do so may result in your car not being released by the starting mechanism to begin the race.

**Wheels and Axles**

* Only the wheels and axles provided may be used.
* Axles may be lightly filed, sanded and polished. This light filing, sanding and polishing is the only change to axle composition allowed. Axle angles and slant may be altered provided the following occur: 1. axle angle does not cause the car’s height to exceed the maximum height and 2. axle design does not cause the car to be wider at any point than the maximum width allowed.
* Wheels may be lightly sanded and polished. This light sanding and polishing is the ONLY wheel modification allowed.

**Weight and Appearance**

* Weight shall not exceed 5 ounces. The readings of the Official Race Scale will be considered final.
* The car may be carved, sculpted, and/or sanded in order to enhance performance and/or appearance.
* No loose materials of any kind are permitted on or inside the car.
* Additional materials may be added to the car for the following purposes only:
	+ - 1. Weights may be added to increase the weight and/or alter the weight distribution of a car.
			2. Paints/decals/decorations may be added to alter the appearance and/or aerodynamics of a car.
			3. Glue may be used to adhere the axles to the car body.
			4. Wood putty, or a similar wood-like substance, may be used to repair minor damage to a car.

**Lubrication**

* Only dry powdered lubricants, such as graphite or white powder Pinewood Derby Car Lubricant, may be used. Oils and silicone sprays are prohibited.
* Once a car passes inspection, it will be in the custody of race officials, who will decide and implement lubrication for all registered cars. Lubrication by contestants will NOT be permitted after weigh-in.

**Ground Rules**

If a car leaves its lane and interferes with another car, the heat will run again. If the same car leaves its lane a second time and interferes with another car, the heat will be run again without the interfering car.

**Inspections and Disputes**

* Each car must pass inspection by the Official Inspection Team before it may compete. The Inspection Team has the right to disqualify those cars which do not meet the rules. Car owners will be informed of the violations and given an opportunity to modify the car to meet these rules.
* Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and/or race area and/or disqualification of your car.