These rules are for cars presented at the Gateway District competition. Cars presented at this level must abide by these rules. These rules are intended for Gateway District level competition and supersede all other rules governing the construction, racing and judging of BSA Pinewood Derby entries.

Entrants may register one car only for Best of Show or Racing, not both.

## **RACING DIVISION**

### General

- 1. Cars must have been made for this school year's Pack-level race. Cars from a previous year's derby are not permitted. You must use the same car you raced at your 2016/17 school year pack race.
- 2. Only one car may be entered by any person in the Pinewood Derby.
- 3. Once cars have been registered, weighed and certified, they will remain in the possession of the race committee until the end of the competition.

### Weight and appearance

- 1. Total weight of car may not exceed 5.0 ounces (141.75 grams). The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided that it is securely built into the body of the car or firmly affixed to it.
- 2. The weight shown on the Official Race Scale is final.
- 3. No loose materials of any kind are permitted in or on the car. No mercury-weighted cars will be allowed.
- 4. The motion of the car may not be mechanically aided. Motors, springs, rubber bands, etc. are prohibited.
- 5. Details such as steering wheel, driver, fenders, decals or painting are allowed, as long as these details do not cause the car to exceed the maximum weight, length and width. Details made of plastic are allowed.
- 6. Cars with wet paint or any other wet spray-on material will not be accepted. Wet glue is not allowed either, all glue must be fully dried.
- 7. All cars may be re-weighed and/or re-inspected at any time for cause, which shall be at the sole discretion of the Chief Judge.

#### Length and width

- 1. Overall width shall not exceed 2 3/4 inches at the furthest horizontal protrusion, whether it is the body of the car, or the wheels. The area where the axels are inserted should be approximately 1 3/4 inches wide to ensure that the wheels will fit over the guide strip on the track.
- 2. Overall length of the car (measured from the furthest point forward to the furthest point rearward) shall not exceed 7 inches (this includes the wheels if extended beyond the car body).
- 3. The wheelbase can be extended and/or moved if desired. Drilling of axle holes into the car is acceptable. It is NOT mandatory to use the pre-cut axle hole slots.
- 4. Height of the car shall not exceed 3 inches.
- 5. The entire car must stage behind the starting pin. (Cars with pointed noses may have difficulty meeting this rule, so be careful if you have a pointed front end on your car)!
- 6. The underside of the front of the car may not be undercut so as to allow the cars nose to hang out over the top of the starting gate. If the nose protrudes over the starting gate and the official starter is not able to adjust for a fair start, the car will not be allowed to race.

Revised: October6,2015 Page 1 of 5

### Wheels and Axles

- 1. In order to qualify for racing, only BSA "official" wheels and axels may be used. The use of any other wheels and/or axels will result in the disqualification of the vehicle from competition.
- No alteration, narrowing, lathe cutting, or re-shaping of wheels (inside or outside) is allowed. Light
  sanding of the wheel treads to remove irregularities is permissible, but must be done with great care to
  avoid going below minimum wheel diameter specifications or minimum wheel weight specifications
  outlined below.
- 3. No alteration, narrowing, lathe cutting or reshaping of wheel hubs is permitted. This includes rounding or "coning" of the hub face that meets the car body. Light sanding of the hub face to smooth the surface is permissible, but must be done with great care to avoid going below minimum wheel weight specifications outlined below.
- 4. The minimum outside diameter of all wheels, as measured by an official "go / no-go" gauge during inspection is 1.180 inches. If you leave the wheel alone, it will meet this specification.
- 5. The minimum wheel width of all wheels, as measured by an official "go / no-go" gauge during inspection is 0.360 inches. If you leave the wheel alone, it will meet this specification.
- 6. The minimum weight of each wheel, which may be measured at the discretion of the racing officials is 2.6 grams. If you leave the wheel alone, it will meet this specification.
- 7. No covers, stickers, or hubcaps will be allowed over the wheels or axles. The axle head must be visible.
- 8. Only the official wheels and axles as provided in the official car kits or the official wheel and axle kits may be used. Do not use similar wheels and/or axels available in hobby stores or online. These may be more highly machined than the "Official Grand Prix Pinewood Derby Kit" and represent an unfair advantage.
- 9. Wheel bearings, spacers, and washers are prohibited.
- 10. The car shall not ride upon any type of springs.
- 11. All cars must have four wheels. Three of the wheels must be touching the track surface at all times.
- 12. The complete inside and outside lettering of each wheel must be visible when the wheel is attached to the body. This allows inspectors to visually inspect that no material has been removed from the wheel
- 13. The car must be free-wheeling with no starting or launching devices.

#### Lubrication

- Only graphite powder or the BSA white lube (T102 / polytetra fluor oethylene) may be used to lubricate
  wheels.
- 2. Lubrication must be applied outside of the building and the car wiped clean before it is brought to the race.
- 3. Once the car has been inspected, it may not be re-lubricated, except when the wheel is damaged or becomes dislodged during a race.

Revised: October6,2015 Page 2 of 5

#### General Rules

- Numbers will be assigned and affixed at registration. The official number shall be clearly marked and visible at all times.
- 2. No one will be allowed beyond the registration area and into the area immediately surrounding the track except the officials. Those areas will be designated as "restricted."
- 3. Each heat will be announced. Cars will be delivered to the Official Starter who will place the cars carefully upon the track. All other persons will remain behind the barrier and will not obstruct the view of the other spectators.
- 4. The Official Starter will make sure that the cars are on the track properly, and then will start the race. He/she will be the judge of whether the cars are properly aligned on the track, of which cars are to race, and in which lane, and of all matters in the starting area. He/she will also be the judge of "false starts".
- 5. Racing results will be determined by a computer timing system which calculates the cumulative time of all race heats for each participant.
- 6. If during a race, a car leaves the track, runs out of its lane, interferes with another car, or loses an axle, etc., the race may be run again. There will be only one repeat race for this reason in any heat. If the same car has such a problem again, the results of such race will stand, unless the problem car clearly interferes with another car. In this case the interfering car will be will be declared the loser. The interfering car will receive a time equal to 9.999 seconds and the remaining 3 cars will be allowed a heat re-run without the offending car participating in that heat.
- 7. Unless software issues prohibit, the slowest time for each car will be discarded.

Revised: October6, 2015 Page 3 of 5

#### Repairs

- 1. There will be an official Pit Area for repairs and alterations. If the car does not qualify at Registration, alterations may be made by the racer and the adult(s) with whom he came.
- 2. Repairs will be permitted after racing begins, but shall take place in the official pit area under the direct supervision of the Chief Judge or his/her designee.
- 3. It is highly recommended that racers bring their own spare parts.
- 4. The Official in charge of the Pit Area will be the judge of what repairs are necessary and allowable. If wheels or axles are replaced, only those wheels and axles actually replaced may be lubricated.
- 5. If a car requires repairs, the race will be delayed for a maximum of 5 minutes to allow the racer to repair his car.
- 6. If the general racing has been delayed 5 minutes, the racer will be called to race, and upon his failure to report to the starting line at this time, he will forfeit the race. The heat will be run and the car will receive a time equal to 9.999 seconds. This allows a car to miss at most one heat without impact as the slowest time is discarded. Cars missing more than 1 heat are essentially disqualified as the 9.999 second heat times will put them in last place.

### Inspections and Disputes

- Each car must pass inspection of the Official Inspection Team before it may compete. The Official
  Inspection Team has the right to disqualify those cars which do not meet these rules. Car owners will be
  informed of the violations and given an opportunity to modify the car to meet these rules before the first
  heat is run. Any car found to be in violation of these rules after having run one or more heats will be
  disqualified.
- 2. Any participant (including parent of the participant) has the right of appeal to the Rules Committee for an interpretation of these rules. The Rules Committee, by majority vote, will be the final judge of these rules.
- 3. Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will not be tolerated and will be grounds for expulsion from the competition and/or race area.

Revised: October6, 2015 Page 4 of 5

These rules are for cars presented at the Gateway District competition. Cars presented at this level must abide by these rules. These rules are intended for Gateway District level competition and supersede all other rules governing the construction, racing and judging of BSA Pinewood Derby entries.

Entrants may register one car only for Best of Show or Racing, not both.

## **BEST OF SHOW DIVISION**

#### General

- 1. The rules for the Pinewood Derby are intended to maintain the competition at a level at which most boys are capable of achieving with minimal adult intervention.
- 2. Cars must have been made for this school year's Pack-level race. Cars from a previous year's derby are not permitted.
- 3. Only one car may be entered by any person in the Pinewood Derby.
- 4. Once cars have been registered and certified, they will remain in the possession of the race committee until the end of the competition.

#### Weight and appearance

- 1. There are no weight restrictions.
- 2. Cars with wet paint or any other wet spray-on material will not be accepted.

#### Length and width

1. There are no length, width or height restrictions.

#### Wheels and Axles

1. There are no wheel or axle restrictions.

### **General Rules**

- 1. Numbers will be assigned and affixed at registration. The official number shall be clearly marked and visible at all times.
- 2. No one will be allowed beyond the registration area and into the area immediately surrounding the track except the officials. Those areas will be designated as "restricted."

#### Inspections and Disputes

- Each car must pass inspection of the Official Inspection Team before it may compete. The Official
  Inspection Team has the right to disqualify those cars which do not meet these rules. Car owners will be
  informed of the violations and given an opportunity to modify the car to meet these rules before the
  judging begins.
- 2. Any participant (including parent of the participant) has the right of appeal to the Rules Committee for an interpretation of these rules. The Rules Committee, by majority vote, will be the final judge of these rules.
- 3. Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will not be tolerated and will be grounds for expulsion from the competition and/or race area.

Revised: October6, 2015 Page 5 of 5