





Welcome to Hong Kong BSA Cub Scouts Pack 1 Pinewood Derby

Date: Sunday March 17, 2012

Time: 12:00pm – 3:00pm

Location: UP GYM

Participants¹: Bears & WeBeLos

Stage	REBEL (non-cub scout ²)	BEAR RANK 	WEBELOS RANK 
Weigh In	12:00 pm	12:00 pm	1:00 pm
Racing	12:15 pm	12:30 pm	1:30 pm
Awards	2:30 pm	1:30 pm	2:30 pm
Clean-up	Afterwards!	Afterwards!	Afterwards!

Weigh In:

In case you are doing this for the first time.... The weigh in is really important. Please see the back of this flyer for the Pinewood Derby rules. All cars must follow the rules for BSA Cub Scout Hong Kong Pack 1 with no exceptions. We want this to be a fair and satisfying experience for all the scouts. One of the basic rules is to not exceed a specific weight. Also, a “triage” station will be ready with graphite (to grease the wheels) and hopefully a glue gun and weights in case you are over/under the limit, or if something simply breaks off. We will also try to accommodate folks who want to test their car on the track. Once you submit the car you will not be able to take it back for further modifications. If during the races your car breaks or needs repair, it will be allowed to make repairs at the discretion of the officiators. To be clear, that also means you cannot add more graphite or lubricant after the car is accepted!

Every car should have a unique name (for instance “Red Racer”) so we can announce it when we have each race heat, so please think of one before you arrive!

¹ Pinewood Derby this year is only for Bear and Webelos. If you are a Tiger or Wolf, you have the chance to do the Raingutter Regatta! Please see here: <http://www.bsapack1hk.org/raingutter-regatta.html>

² Dads or siblings of current Bears or Webelos that are not otherwise cub-scouts. Subject to limitations on slots! Rebel category do **not** have design awards, only race awards.

At check-in you will go to the weigh-in station, where your car will be weighed and then registered. A sticker will be placed on the bottom of the car (behind the rear axle) to identify it with a unique # and to have room to record the scores from each heat. Please think of this when you are designing your car.

Races:

There will be awards for 1st, 2nd and 3rd place for each rank (and separate for “Rebels”) will be held in a combination of heats to ensure that all the cars will have a chance to compete on different tracks. Points will be awarded for 1st – last place of each heat. After all the heats are done, the top cars will be assembled for a final race for each rank.

Awards:

Design awards will be given for the following categories:

- Scout Spirit
- “Green” (eco-friendly)
- Patriotic (country of your choice)
- Funniest or Silliest

Rebels Race / Extra car kits:

If you want to register in the “Rebels” race (dads, moms, siblings) please contact your den leader or contact Jeff Lee @ jeffdlee@gmail.com (9363-8821). The registration fee is HK\$100 which includes 1 car kit.

If you would like an extra car kit, a limited number are available for HK\$50. This does not include participation in the “Rebels” race and is just if you have a family member who wants to build a car “alongside” your cub scout, or an extra in-case you make a tragic mistake ☺. If you are interested in an extra kit please contact Jeff Lee as per above.

Tips:

Check out the official Pinewood Derby Website of the Cub Scouts: <http://pinewoodderby.org/>

Triage station: Extra graphite will be available at the triage station at UP GYM on the day of the race. If you are going to use this graphite, do not put anything else in the wheel well / axle (nail) beforehand or it may interact and clog your wheel. We will also have a test scale and a hot glue gun, and hopefully some extra weights but bring your own extra weights (or coins) etc. since there will only be a limited quantity.

HONG KONG BSA CUB SCOUTS PACK 1

OFFICIAL PINEWOOD DERBY RULES

NOTE: IN THE EVENT OF ANY DISCREPANCY WITH WHATEVER YOU FIND ON THE INTERNET, THE BELOW RULES WILL TAKE PRECEDENCE. THIS IS TO ENSURE A LEVEL PLAYING GROUND FOR ALL THE PARTICIPANTS.

Length, Width and Clearance

At weigh-in, we will have a template (cardboard cut out) which the car will have to be able to clear that checks the car's overall width and length.

- (a) The maximum overall width (including wheels and axles) shall not exceed 2¾ inches (70mm).
- (b) The minimum width between the wheels shall be 1¾ inches (44mm) so that the car will clear the center guide strip on the track.
- (c) The minimum clearance between the bottom of the car and the track surface shall be 3/8 inch (10mm) so the car will clear the center guide strip on the track.
- (d) The maximum overall length shall not exceed 7 inches (178mm).
- (e) The wheelbase (distance and location between the front and rear axles) may not be changed from the kit body.
- (f) Only the official Pinewood Derby Kit passed out by the Pack may be used. No pre-built or other kits may be used.

Weight and Appearance

- (a) Weight shall not exceed 5 ounces (141.7 gm). The reading of the **official scale in METRIC form (grams)** will be considered final. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided the material is securely built into the body or firmly affixed to it.
- (b) No liquids or loose materials of any kind are permitted in or on the car.
- (c) Details such as steering wheel, driver, spoiler, decals, painting and interior details are permissible as long as these details do not exceed the maximum length, width or weight specifications.
- (d) Cars with wet paint will not be accepted.

Wheels and Axles

- (a) Axles and wheels shall be only as provided in the Official Grand Prix Pinewood Derby Kit.
- (b) Wheels may be lightly sanded to smooth out molding imperfections on the tread area. This light sanding is the only modification allowed. Beveling, tapering, thin sanding, wafering or lathe turning of the wheels is prohibited.
- (c) Axles may not be altered in any way except for polishing.
- (d) Wheel bearings, washers, bushings, and hub caps are prohibited.
- (e) The car shall not ride on any type of springs.
- (f) The car must be freewheeling, with no starting device or other type of propulsion.

Lubrication

- (a) Only graphite or powdered teflon "white lube" will be allowed for lubricating the wheels. A limited amount of graphite will be available at the triage station. **ADVICE: do not inter-mix graphite with the white-lube, it could have adverse effects!**
- (b) All lubrication must be completed before weigh-in.

Registration and Weigh In

- (a) Cars must be submitted for registration by the deadline on the first page of this flyer, separated by rank.
- (b) Each car's weight will be verified before acceptance for registration.
- (c) Each car will be given a unique registration number on a pre-printed sticker that identifies (1) its owner's age group (B = Bear; W1 = Web1 and W2 = Web2, etc.). Constructors are requested to leave space for their registration stickers (see overleaf)

Registration Stickers

- (a) Constructors are requested to leave a flat space on the underside of their cars for the attachment of registration stickers. The stickers will be approximately 1½" x ¾" (as shown).
- (b) All registration numbers will be prefixed with the letters "A" or "B" which will define which of the two tracks each will race on.
- (c) Race scores will be recorded in the six squares beside the registration number (see below).

Web1 A04	Race 1	Race 2	Race 3
	Race 4	Race 5	Race 6

Security

- (a) All cars will be placed in a secure area from the time they are registered at "weigh-in" until completion of racing.
- (b) Once placed in security, **owners will not be allowed access to their cars except in the event of accidental damage during racing when running repairs will be permitted.**

Race Procedures

- (a) Racing will be conducted on a 6-lane track.
- (b) Cars from each of the ranks will be raced separately, beginning with the Bears' cars and ending with the Web's cars.
- (c) Six "rounds" of races will be held, each car being raced six times, once on each lane of the track that it is assigned to.

Race order:

- (a) Where between 24 and 36 cars are registered for an age group (between 12 and 18 for each track), three races will be run in each "round" (i.e. 18 races total) on each track in the race order given overleaf.
- (b) Where between 12 and 24 cars are registered for an age group (between 7 and 12 for each track), two races will be run in each "round" (i.e. 12 races total) on each track in the race order given overleaf.
- (c) Where 12 or less cars are registered for an age group (6 or less for each track), one race will be run in each round (i.e. 6 races total) with each car being raced on all the six lanes.

Race Judging and Awarding of Points

- (a) Appointed race judges will mark scores in the appropriate square on the registration labels of the first four cars in each race as follows: 4 points to the winner, 3 points to 2nd place; 2 points to 3rd place; and 1 point to 4th place. [Judges should also mark 0 on the labels of the 5th and 6th placed cars.]
- (b) At the completion of racing, the scores of each car will be added up, based on which the winners of each race award will be selected.
- (c) In the event of a tie, run-offs will be run between the tied cars. The number of run-offs will equal to the number of tied cars, each car being given different lanes for each run-off.
- (d) All judges' decisions will be final.

Constructors' Awards

- (a) Appointed judges will judge the cars registered for racing according to Constructors' Award categories listed on the front of this flyer.
- (b) Judging will be subjective and winning cars may be chosen either by counting of votes or by general agreement between judges and race organizers.
- (c) All judges' decisions will be final and no discussion on their decision will be entered into.

RACE ORDERS FOR CARS ON EACH TRACK

Race order for between 1 and 6 cars on each track:

Round	Race No	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6
1	1	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
	2	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>1</i>
	3	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>1</i>	<i>2</i>
	4	<i>4</i>	<i>5</i>	<i>6</i>	<i>1</i>	<i>2</i>	<i>3</i>
	5	<i>5</i>	<i>6</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	6	<i>6</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>

Race order for between 7 and 12 cars on each track:

Round	Race No	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6
1	1	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
	2	<i>7</i>	<i>8</i>	<i>10</i>	<i>9</i>	<i>11</i>	<i>12</i>
2	1	<i>12</i>	<i>9</i>	<i>11</i>	<i>3</i>	<i>4</i>	<i>1</i>
	2	<i>8</i>	<i>6</i>	<i>5</i>	<i>10</i>	<i>7</i>	<i>2</i>
3	1	<i>3</i>	<i>4</i>	<i>1</i>	<i>8</i>	<i>2</i>	<i>7</i>
	2	<i>11</i>	<i>10</i>	<i>9</i>	<i>12</i>	<i>6</i>	<i>5</i>
4	1	<i>2</i>	<i>7</i>	<i>4</i>	<i>1</i>	<i>10</i>	<i>9</i>
	2	<i>6</i>	<i>3</i>	<i>8</i>	<i>5</i>	<i>12</i>	<i>11</i>
5	1	<i>9</i>	<i>5</i>	<i>2</i>	<i>11</i>	<i>1</i>	<i>3</i>
	2	<i>4</i>	<i>12</i>	<i>7</i>	<i>6</i>	<i>8</i>	<i>10</i>
6	1	<i>5</i>	<i>1</i>	<i>12</i>	<i>7</i>	<i>9</i>	<i>8</i>
	2	<i>10</i>	<i>11</i>	<i>6</i>	<i>2</i>	<i>3</i>	<i>4</i>

Race order for between 13 and 18 cars on each track:

Round	Race No	Track 1	Track 2	Track 3	Track 4	Track 5	Track 6
1	1	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
	2	<i>7</i>	<i>8</i>	<i>10</i>	<i>9</i>	<i>11</i>	<i>12</i>
	3	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>
2	1	<i>12</i>	<i>9</i>	<i>16</i>	<i>3</i>	<i>4</i>	<i>13</i>
	2	<i>14</i>	<i>6</i>	<i>11</i>	<i>10</i>	<i>18</i>	<i>2</i>
	3	<i>8</i>	<i>15</i>	<i>5</i>	<i>17</i>	<i>7</i>	<i>1</i>
3	1	<i>15</i>	<i>4</i>	<i>9</i>	<i>8</i>	<i>13</i>	<i>5</i>
	2	<i>11</i>	<i>10</i>	<i>17</i>	<i>12</i>	<i>6</i>	<i>7</i>
	3	<i>3</i>	<i>16</i>	<i>1</i>	<i>18</i>	<i>2</i>	<i>14</i>
4	1	<i>2</i>	<i>7</i>	<i>4</i>	<i>1</i>	<i>10</i>	<i>9</i>
	2	<i>6</i>	<i>3</i>	<i>8</i>	<i>5</i>	<i>12</i>	<i>11</i>
	3	<i>16</i>	<i>17</i>	<i>18</i>	<i>13</i>	<i>14</i>	<i>15</i>
5	1	<i>17</i>	<i>5</i>	<i>7</i>	<i>11</i>	<i>8</i>	<i>16</i>
	2	<i>9</i>	<i>18</i>	<i>13</i>	<i>6</i>	<i>15</i>	<i>3</i>
	3	<i>4</i>	<i>12</i>	<i>2</i>	<i>14</i>	<i>1</i>	<i>10</i>
6	1	<i>5</i>	<i>1</i>	<i>14</i>	<i>7</i>	<i>16</i>	<i>4</i>
	2	<i>10</i>	<i>11</i>	<i>6</i>	<i>15</i>	<i>3</i>	<i>17</i>
	3	<i>18</i>	<i>13</i>	<i>12</i>	<i>2</i>	<i>9</i>	<i>8</i>