

## January 2008 Theme -- “Cub Scout Car Show”

Cars have fascinated every generation since their invention in 1769. They've been featured in many movies and on television. Discover the different kinds of cars and trucks such as limousines, taxis, van's, pickups, SUV's and racecars. Learn how these vehicles are built, repaired, modified and sold. Visit a car dealership, auto mechanic or auto parts dealer. Boys can build car or truck models or create a model of a showroom or a garage with miniature die cast cars. Participate in a slot car race or pinewood derby race with your den or pack.



Webelos Activity Badges for January 2008:  
Fitness & Readyman.

Starting in December 2007 you will find the latest edition of Baloo's Bugle at <http://www.usscouts.org/bbugle/bb0712/index.html>. The following resources are supplements to your monthly Program Helps.

### ***History of the Automobile***

#### **In the Beginning...**

In 1769, the very first self-propelled road vehicle was a military tractor invented by French engineer and mechanic, Nicolas Joseph Cugnot (1725 - 1804). Cugnot used a steam engine to power his vehicle, built under his instructions at the Paris Arsenal by mechanic Brezin. It was used by the French Army to haul artillery at a whopping speed of 2 1/2 mph on only three wheels. The vehicle had to stop every ten to fifteen minutes to build up steam power. The steam engine and boiler were separate from the rest of the vehicle and placed in the front (see engraving above). The following year (1770), Cugnot built a steam-powered tricycle that carried four passengers.

In 1771, Cugnot drove one of his road vehicles into a stone wall, making Cugnot the first person to get into a motor vehicle accident. This was the beginning of bad luck for the inventor. After one of Cugnot's patrons died and the other was exiled, the money for Cugnot's road vehicle experiments ended.

Steam engines powered cars by burning fuel that heated water in a boiler, creating steam that expanded and pushed pistons that turned the crankshaft, which then turned the wheels. During the early history of self-propelled vehicles - both road and railroad vehicles were being developed with steam engines. (Cugnot also designed two steam locomotives with engines that never worked well.) Steam engines added so much weight to a vehicle that they proved a poor design for road vehicles; however, steam engines were very successfully used in locomotives. Historians, who accept that early steam-powered road vehicles were automobiles, feel that Nicolas Cugnot was the inventor of the first automobile.

It is generally acknowledged that the first automobiles with gasoline powered internal combustion engines were completed almost simultaneously by several German inventors working independently: Karl



Benz built his first automobile in 1885 in Mannheim. Benz was granted a patent for his automobile on January 29, 1886 and began the first production of automobiles in 1888. Soon there after, Gottlieb Daimler and Wilhelm Maybach in Stuttgart in 1889 designed a vehicle from scratch to be an automobile rather than a horse carriage fitted with an engine. They also were inventors of the first motor bike in 1886. Much earlier, above mentioned Siegfried Marcus in Vienna built his crude First Car (engine on handcart) around 1870. His Second Car with four seats may have run only in 1888-1889, thus after Benz - and Marcus never applied for a general patent for his liquid-fuel wheelers, only for his Second's ignition. One of the first four wheel petrol-driven automobiles built in Britain came in Birmingham in 1895 by Frederick William Lanchester who also patented the disc brake.

### Gasoline Powered Cars

The first production of automobiles was by Karl Benz in 1888 in Germany and under license to Benz, in France by Emile Roger. By 1900 mass production of automobiles had begun in France and the United States. The first company to form exclusively to build automobiles was Panhard et Levassor in France. Formed in 1889, they were quickly followed by Peugeot two years later. In the United States, brothers Charles and Frank Duryea founded the Duryea Motor Wagon Company in 1893, becoming the first American automobile manufacturing company. However, it was Oldsmobile who would dominate this era of automobile production. Its large scale production line was running in 1902. Within a year, Cadillac (formed from the Henry Ford Company), Winton, and Ford were producing cars in the thousands.

Within a few years, a dizzying assortment of technologies were being produced by hundreds of producers all over the Western world. Steam, electricity, and gasoline-powered autos competed for decades, with gasoline internal combustion engines achieving dominance in the 1910s. Dual- and even quad-engine cars were designed, and engine displacement ranged to more than a dozen liters. Many modern advances, including gas/electric hybrids, multi-valve engines, overhead camshafts, and four-wheel drive, were attempted and discarded at this time.



### Electric Powered Cars

Electric motive power started with a small railway operated by a miniature electric motor, built by Thomas Davenport in 1835. In 1838, a Scotsman named Robert Davidson built an electric locomotive that attained a speed of four miles an hour. In England a patent was granted in 1840 for the use of rails as conductors of electric current, and similar American patents were issued to Lilley and Colten in 1847. [3]

Between 1832 and 1839 (the exact year is uncertain), Robert Anderson of Scotland invented the first crude electric carriage, powered by non-rechargeable Primary cells.

By the 20th century, electric cars and rail transport were commonplace, with commercial electric automobiles having the majority of the market. Electrified trains were used for coal transport as the motors did not use precious oxygen in the mines. Switzerland's lack of natural fossil resources forced the rapid electrification of their rail network.

Electric vehicles were among the earliest automobiles, and before the preeminence of light, powerful internal combustion engines, electric automobiles held many vehicle land speed and distance records in the early 1900s. They were produced by Anthony Electric, Baker Electric, Detroit Electric, and others and at one point in history out-sold gasoline-powered vehicles.



## The Ford Model T

Henry Ford incorporated the Ford Motor Company in 1903, proclaiming, "I will build a car for the great multitude." In October 1908, he did so, offering the Model T for \$950. In the Model T's nineteen years of production, its price dipped as low as \$280. Nearly 15,500,000 were sold in the United States alone. The Model T heralds the beginning of the Motor Age; the car evolved from luxury item for the well-to-do to essential transportation for the ordinary man.

Ford revolutionized manufacturing. By 1914, his Highland Park, Michigan plant, using innovative production techniques, could turn out a complete chassis every 93 minutes. This was a stunning improvement over the earlier production time of 728 minutes. Using a constantly-moving assembly line, subdivision of labor, and careful coordination of operations, Ford realized huge gains in productivity.

In 1914, Ford began paying his employees five dollars a day, nearly doubling the wages offered by other manufacturers. He cut the workday from nine to eight hours in order to convert the factory to a three-shift workday. Ford's mass-production techniques would eventually allow for the manufacture of a Model T every 24 seconds. His innovations made him an international celebrity.

There were several cars produced or prototyped by Henry Ford from the founding of the company in 1903 until the Model T came along. Although he started at the Model A, there were not 19 production models; some were only prototypes. The production model immediately before the Model T was the Ford Model S, an upgraded version of the company's largest success to that point, the *Model N*. For some reason, the follow-up was the Ford Model A and not the Model U. Company publicity said this was because the new car was such a departure from the old that Henry wanted to start all over again with the letter A. As it happens, the first Plymouth car (1928), built by competitor Chrysler Corporation, was named the Model U.

In the international poll for the award of the world's most influential car of the twentieth century the Ford Model T came first.



## The Limousine

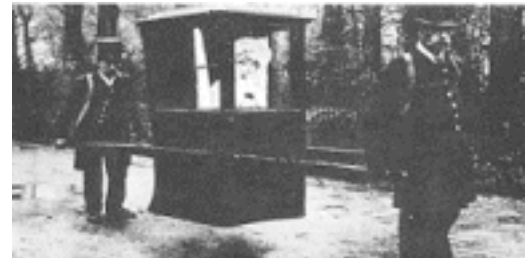
Whether we've stared longingly at one, or had the pleasure of riding in one, the limousine has, since the early 1700's, offered a luxurious and stylish mode of transport to get the rich and famous from A to B.

The words "limousine" and "chauffeur" have been used since before the 20th Century when carriages and trains required professional drivers to manage horses and steam engines. In addition, the word "limousine" originated from the Limousine region of France where shepherds would use an over-sized, hooded garment to protect themselves from the weather. The drivers of automobiles later used such a garment as they sat in the open and exposed cockpits, whilst their master and owner of the vehicle rode in luxury in the rear seats.

Commencing with the Sedan Chair around the 1720s, right through to the new Millennium version of the American White Stretch Limousine each mode of transport has reflected a sure symbol of status – oozing wealth, class and sophistication.

Leaving behind the Sedan Chairs and the Horse-Drawn Carriages, the first "Stretch Limousine" was created in Forth Smith, Arkansas in the United States of America as early as 1928 by a coach company named Armbruster. The cars were primarily used to transport famous "big band" leaders, such as Glenn Miller and Benny Goodman, and orchestras, as well as their musical equipment and instruments, across the US. As a result, the early stretch cars were referred to as "big band buses".

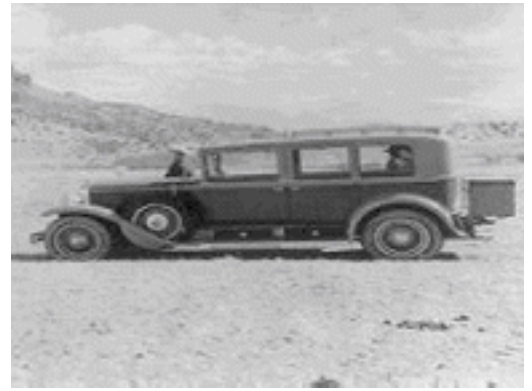
Moving into the 1930s and 40s "Airporter Stretch Coaches" were produced and used throughout America by hotels to transport guests from airports, and by sightseeing tourist companies to take groups of guests on tours. Of course around this time Stretch Limousines were a "must have" by all Hollywood actors and actresses, in addition to the practical use of transporting film crews and stage personnel around the moving sets.



In 1962, Armbruster merged with Stageway Coaches from Cincinnati in Ohio, USA, and became Armbruster-Stageway Coachbuilders. In 1974, the first six-door funeral limousines were built on Cadillac chassis, and eventually a product line of Lincoln Stretch Limousines was included due to the growing popularity of Lincoln within the limousine and funeral industries, however the general mission statement for the cars and the company was simply "to move people from place to place, only in larger cars".

Moving into the 1960s and 70s limousines were increasingly used for general use by American presidents and moviestars, and due to their increase in popularity, many more custom coachbuilders began trading. In addition, Federal Coach bought out Armbruster-Stageway in the late 1980s, although the tradition commenced nearly eighty years ago remains.

Today's Stretch Limousines can be used for any purpose to make any occasion a day to remember. Cars can be custom-crafted on any chassis that the owner desires, and in terms of the accessories included in the model, the sky's really are the limit!



## The Taxicab

### HORSE-CABS AND HACKNEY CARRIAGES IN LONDON

The name 'hackney' as used in hackney coaches and hackney cabs came from the Norman French word 'Hacquenée', meaning a horse for hire. The first record of hackney coaches plying for hire in London was in 1588, when one Captain Baily, a veteran of Sir Walter Raleigh's expeditions put four coaches to work by the maypole in the Strand. By the 1760s, there were over a thousand 'hackney hell carts' thronging the streets of London, causing considerable congestion. In 1823 a two-seat, two-wheeled carriage called a cabriolet was introduced. It was very popular for its speed and comfort and from this vehicle we derive the name 'cab'. From the middle of the 19th century two types of cab began to dominate, the two-wheeled hansom, a fast and elegant carriage and the ponderous four-wheeled 'growler' which, with its luggage carrying ability was to be found mostly at railway stations.



Some horse cabs continued to ply for hire into the 1930s but most had gone by the outbreak of the First World War in 1914. London's very last horse cab licence was surrendered on the 3rd April 1947.

London's first motor cabs were electrically powered. They were called Berseys after the manager of the London Electrical Cab Company, who ran them, but were nicknamed 'Hummingbirds' from the sound that they made. 25 were introduced in August 1897 and by 1898 a further fifty of them were at work. Unfortunately, they proved unreliable and there were a number of accidents, including one fatality. Public confidence in them evaporated and they were withdrawn by 1900.

The first petrol powered cab in London was a French-built Prunel, introduced in 1903. Other early British makes included Rational, Simplex and Herald but these appeared in small numbers. An attempt to introduce 200 American Ford Model Bs failed through lack of finance, as did efforts by Rover and others. Some of the oddities that appeared, and disappeared almost as quickly included the Vauxhall hansom cab with its driver perched behind the body and the front wheel drive 'Pullcar'. At the end of in 1906 there were less than 100 motor cabs in London, but the appearance of the General Cab Company's five hundred Renault cabs revolutionized the trade.

### **TAXICABS IN NEW YORK**

By the end of the 19th century, automobiles began to appear on city streets throughout the United States. It was not long before a number of these cars were hiring themselves out in competition with horse-drawn carriages. Although these electric-powered cabs were slightly impractical (with batteries weighing upwards of eight hundred pounds), by 1899 there were nearly one hundred of them on New York's streets. Many believed that these new cabs would provide a cleaner, quieter, and faster way to travel. But progress has always had its price, and on September 13th of that year, a sixty-eight year-old man named Henry H. Bliss was helping a friend from a street car when a taxi swerved and hit him, giving Bliss the dubious distinction of being the first American to die in an automobile accident, and giving cabbies a first glimpse at a reputation they would soon solidify.

Eight years later, the New York Taxicab Company made the bold decision to import six hundred cars from France. Powered by gasoline, these red-and-green-paneled cars were the first in a new generation of city transportation. Though automobiles still made up only a fraction of New York traffic, their popularity was growing, due primarily to their easy upkeep. With the accessibility of gas-powered cars and the introduction of the taximeter (used to gauge miles traveled and time elapsed) the taxi industry flourished. By the teens, there were half a dozen large fleets, and thousands of independent owner/drivers. However, at fifty cents a mile, cabs were still geared toward the relatively wealthy.

By the 1920s many industrialists had realized the economic potential of a popular taxi industry. While the largest fleets were primarily owned by the major automobile manufacturers like General Motors and the Ford Motor Company, by far the biggest and most successful was the Checker Cab Manufacturing Company. Founded by Morris Markin, a young Russian immigrant, Checker Cabs produced the large yellow and black taxis that would become one of the most recognizable symbols of mid-20th century urban life. Though produced in Kalamazoo, Michigan, Checker cabs were, for many years, the most popular taxis in New York City.

As companies like Checker grew, so did the need for enforceable regulations. Cabbies were often the victims of unfair labor practices, and passengers the victims of price gouging. Neither the police nor the Taxicab Commission could temper the corruption. With the increase in drivers during the Depression, cabbies found themselves fighting for every fare. General unrest over driving conditions and salaries was exacerbated by news that the Checker Cab Company had been bribing the then Mayor, James J. Walker. Tensions grew and in 1934 more than 2,000 taxi drivers took over Times Square in what many called the biggest strike the city had seen.

In response to this unrest Mayor Fiorello H. La Guardia signed the Haas Act of 1937, which introduced official taxi licenses and the medallion system that remains in place to this day. Medallions are small plates attached to the hood of a taxi, certifying it for passenger pick-up throughout the city. Providing a limited number of medallions, the government could keep a closer watch on the quality and quantity of taxis in the city. While attempting to assure better wages for the drivers, many of whom at the time were Irish, Italian, or Jewish immigrants working long days in difficult conditions, the new medallion system gave increased power to a handful of large fleet owners.

Today there are 12,187 taxis and some 40,000 drivers in New York City. They are the focus of sitcoms, ad campaigns, news reports and countless anecdotes. With the Checker cabs retired and mini-vans and SUVs in their place, taxis have become a true reflection of their time. They take more than two hundred million passengers almost eight hundred million miles a year.



## The Jeep

During World War I, the U.S. Army needed a fast, lightweight all-terrain vehicle. In 1940, the Army called on the automotive companies to create a working prototype (fitting army specifications) in forty-nine days. Willy's Truck Company was the first company to create the right prototype. The new vehicle was nicknamed "the Jeep." General Dwight D. Eisenhower said that America could not have won World War II without it.

After several tentative versions the specifications laid down by the Quartermaster Corps, on July 7, 1940, called for:

- A driving front axle with 2-speed transfer case including provisions for disengaging the front axle drive.
- A body of rectangular design with a folding windshield and 3 bucket seats.
- Increased engine power (presumably in respect to the *Belly-flopper* prototype).
- Means for towing.
- 30-caliber machine gun mount.
- Blackout lighting.
- Oil-bath air cleaner.
- Hydraulic brakes.
- Full floating axles.
- Wheelbase of 80".
- Maximum height of 40".
- Maximum weight of 1275 lbs.
- Approach and departure angles of 45 and 40 degrees, respectively.
- Must reach 50 mph on hard surface.
- Special bracing for a pintle hook setup.
- No aluminium to be used for cylinder head.
- At least 4 cylinders.
- 8 of the 70 vehicles to made had to be four-wheel-steer.



## The Humvee

In 1979, AM General began preliminary design work on the M998 Series High Mobility Multi-Purpose Wheeled Vehicle (HMMWV, pronounced Humvee®); a 1.25-ton truck intended to replace the M151 and other light tactical vehicles, such as the venerable Jeep. The U.S. Army awarded AM General a prototype contract in 1981 and the development and operational testing was conducted over a five-month period in 1982.

The Humvee offers exceptional speed, mobility and agility and is built upon a multi-purpose platform, which will accommodate a broad range of configurations. Humvees feature full-time four-wheel drive, independent suspension, steep approach and departure angles, 60 percent gradeability and 16 inches of ground clearance. Humvees are currently in use by the U.S. Army, Marine Corps, Air Force and Navy at locations throughout the United States and overseas.



## **Pack and Den Activities**

### **Pinewood Derby Model Car Racing**

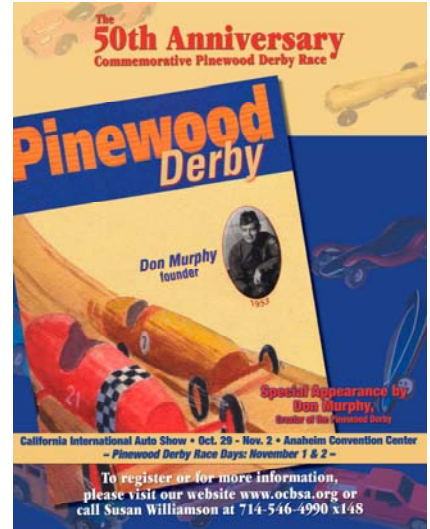
The Pinewood Derby is one of the most popular events in Cub Scouting. Every year more than a million boys and parents team up to carve, decorate, weigh, adjust, fret over, and finally race a Pinewood Derby car. The first Pinewood Derby was held in 1953 by Cub Scout Pack 280C of Manhattan Beach, California, and as of 1991 (Ref. 1992 BSA Retail Catalog) more than 81 million Pinewood Derby model car kits have been sold. Wow!!

This event is also known as "**Shape N Race Derby**" in the Christian Service Brigade, and "**Kub Kar Rally**" in Canada's scouting organization. Much of the information here is applicable to similar events, such as the Rain-Gutter Regatta.

The purpose of the Pinewood Derby is to help the Cub Scout build a team relationship with their parent or helper, experience the sense of accomplishment and the excitement of competition, learn Win/Lose good sportsmanship, and to have fun. The model cars are made of wood to specified dimensions, created, carved, assembled, and decorated by Cub Scouts under the guidance of the parents or helpers. The cars are gravity powered and run down a special track.

Like all successful events, it requires some planning and preparation, but the payoff in fun and strengthening family relationships has been proven over the years. By following a plan and distributing responsibility among several Cub Scout parents and leaders, you can plan and achieve a successful Pinewood Derby. The attached instructions, checklist, and activities should be helpful in organizing and conducting a Pinewood Derby.

For lots more information about the Pinewood Derby, go to <http://www.usscouts.org/pinewood/cspine.html> .



### **Pinewood Derby**

Each year for Christmas wrapped in shape of a box  
This Cub scout receives a gift and no it's not socks  
Some axles and wheels, a small piece of pine  
You wonder what it is that makes his eyes shine

That Cub scout, he knows, his mind all in a whirl  
These small pieces, more precious than pearls  
For in his hands he is holding a dream that is due  
To enter a race to be held in month, maybe two

But for this one scout, this race it will be his last  
For he is a Webelo, his car will have to be fast  
As he turns the small piece of pine in his hand  
His mind is on shapes and he starts to plan

He gathers pencils, paper and a carbon or two  
Traces, erases, discards, and decides on a few  
It will continue like this for a few days more  
Can't make up his mind, making his brain sore

Finally, picking his pattern his relief is quite great  
Then we stand by for action, it is time to create  
Out come the tools, a knife ,a saw and a drill  
There is nothing like it, it is such a great thrill

To have watched this young grandson we adore  
Year after year, build the cars, this will be four  
I can now see the wheels turning in his head  
Should I design this one or that one instead

Now the pattern is chosen, he traces the shape  
With pencil to carbon, then he uses his tape  
Making sure the length meets what is set out  
In the rules that must be met by all of the scouts

He now turns to the saw, the goggles go on  
Safety comes first or rule one will be blown  
With his granddad or dad standing close by  
He starts the cut and the sawdust does fly

When the dust settles, he fingers the cut wood  
Then lifting up his goggles and nothing could  
Ever be more prideful than the grin on his face  
It is just the start, preparing for one last race

He runs his hands over the shaped piece of pine  
I wonder what he's thinking, I'd give a whole dime  
Picking up the paper to sand the wood just right  
For hours he works with it late into the night

For days and days he leaves it sitting to the side  
Thinking of paint and stickers, then eyes open wide  
You can see the idea in his head start to form  
Man or man this one will be out of the norm

Picking up his scout knife, he carves the first line  
Places for the headlights, now this will take time  
He has been taught the right way to handle a blade  
He carefully finishes it, the groove has been laid

The knife is then closed, so carefully put away  
Now on for the fun part, Hurrah! and Hooray!  
This car, his last, has been built just for speed  
Down deep inside him this hunger this need

For to be Grand Champion the head of the pack  
Just one memory to savor, one day looking back  
Tell his sons, of long ago times and to talk about  
What it was like to learn and live the life of a scout

For now the time has come to just leave it alone  
It is just perfect, time to let it stand on it's own  
All the work that can be done has been done  
He now feels it in his heart that this is the one

His dad and granddad and he all act as one  
Packed in a special box, the time has come  
To submit it to be judged, then the long wait  
He can't touch it again, it's now all up to fate

His car is now checked for weight and design  
To see if directions were followed line by line  
His weight, length and height are all just right  
His car has a number, impounded for the night

None will see the cars till the Derby Day Race  
Now preparations for the day pick up the pace  
The leaders, parents and scouts volunteers all  
Join, to ready the track, they all answer the call

Derby race day is here, he is up with the sun  
Trying to remember what he might have done  
To build his car so it would have more speed  
It is all too late, for he has now done the deed

The large building in which the race is to be run  
Is filled with families of scouts who have done  
Each one their best that they could possibly do  
Do your best. is the motto, and each held it true

The excitement builds as all take their places  
The anticipation the fever I see in small faces  
The ceremony to honor our flag is has begun  
The salute to the same all now pledge as one

The first cars now race swiftly down the track  
The pace will be kept, there will be no slack  
Yelling and screaming and cheering, we each  
Encourage our own boy a crescendo we reach

The eyes of each boy is now sparkling with zeal  
Hoping against hope that he wont lose a wheel  
As cars plummet down the track one last time  
I look at the scoreboard the moment sublime

He's done it I scream and jump up and down  
He'd won the den, the pack, now the last round  
Of the District Derby which has been his dream  
To be grand champion, again I start to scream












With tears in my eyes and a silly grin on my face  
I hug my husband, son, everyone in the place  
I turn to face my grandson blow a kiss and sigh  
I give him a sign, two fingers in victory held high

It's not the trophies that he has won on this day  
The accolades of what others have had to say  
It's in his heart and mind that someday will rest  
That as a Cub Scout, he tried and did his best



## Use of Flags in Auto Racing

In open-wheel, stock-car and other types of circuit auto races, flags are displayed to indicate the general status of a race and to communicate instructions to competitors in a race. While the flags have changed from the first years (e.g. red used to start a race), these are generally accepted for today.

Flag	Displayed from start tower	Displayed from observation post
	The race has started or resumed after a full caution or stop, or the race is proceeding normally.	End of hazardous section of track.
	Full course caution condition for ovals. On road courses, it means a local area of caution. Depending on the type of racing, either two yellow flags will be used for a full course caution or a sign with 'SC' (Safety car) will be used as the field follows the <a href="#">pace/safety car</a> on track and no cars may pass.	Local caution condition — no cars may pass at the particular corner where being displayed.
	Debris or slippery patches on the track.	
	The car with the indicated number must pit for consultation.	The session is halted; all cars on course must return to pit lane.
	The car with the indicated number has mechanical trouble.	
	The driver of the car with the indicated number has been penalized for misbehaviour.	
	The driver of the car with the indicated number is disqualified or will not be scored until they report to the pits.	
	A car must allow another car to pass if the flag is blue only. With an orange or yellow stripe, it simply serves as a warning that faster traffic is behind.	A car is being advised to give way to faster traffic approaching.
	The race is stopped— all cars must halt on the track or return to pit lane.	
	One lap remains.	A slow vehicle is on the track.
	The race has concluded.	

## Cubinaplois

As you can imagine, it must have something to do with cars, so--

1. Find a cardboard box for each boy that is large enough to fit around his middle--he will be inside the box. The box should be no more than 12" to 15" tall. Fold top and bottom flaps inside, stand in the box and pull it up to where the boy can put his arms over the outside of the box and hold it up with his hands on the bottom edge. Optionally, you can rig some sort of suspenders so the boy has his hands free and can "wear" the box.
2. Use your resources and imagination and decorate the box to look like a race car. Use solo cups for headlights, paper plates for wheels, tuna cans for tail lights, tape for chrome, whatever your imagination can come up with. Put on bumpers, windows, etc. Make it safe in case the boy falls down while wearing the car.
3. Choose a large grassy area (school yard, park, etc.) for the race. Set up a race track, complete with pit areas on opposite sides of the track. Whatever your markers are, be sure they are safe.
4. Race your cars two at a time. Each race will consist of 7 laps around the track and three "pit stops". The pit crew is made up of members of the boy's family. It goes like this:
  - Run one lap - pit stop - Wash windshield (Family washes the boy's face with "wet one", wash cloth, etc.)
  - Run two laps - stop - refuel (family provides small cup of juice, lemonade, etc. with straw--boy drinks all)

- Run two laps - stop - change tires (family puts large socks over boy's shoes and sends him off again - in lieu of socks, paper hospital booties work great.)
  - Run two laps to finish line.
5. Pit crew should have signs telling how many laps have been completed and when to stop.
  6. Do it just for fun, or time the boys and award funny prizes for winners. Also give prizes for car designs (most unique, funniest, etc.), best pit crew, anything you can think of to make the boys feel good about their efforts. After the race, have watermelon for everyone and have a watermelon seed spitting contest.

**Most importantly--have FUN!**

## **AUDIENCE PARTICIPATION**

### **Automatic Laughs**

Personnel: Assign the parts and have the group practice. Narrator read the story, and groups respond to appropriate word.

Blue: all those with blue eyes pat the top of their head

Brown: all those with brown eyes pat the top of their head

Left: all those that are left-handed clap their hands

Right: all those that are right handed clap their hands

New: all those under 20 years of age stomp their feet

Old: All those over 20 years of age stomp their feet

Man: all males stand up

Woman: all females stand up

One day a man and a woman went to the store looking for a new car. Their old one, which was muddy brown was not running well. It left much to be desired in the way of speed and safety, and they wanted another one right away. They wanted a bright blue one. As they walked in the dealership, the woman noticed a blue sports car on the showroom floor.

"Darling," said she. "Look at the lovely new car right over there. Wouldn't it be perfect for us?"

"You may be right. It's a lot better than our old brown buggy. Unfortunately, there's one problem, I've left all my money at home," said the man.

"You've left it at home?" asked the woman.

"Yes, it's right in the pocket of my new brown suit," said the man.

"Your new brown suit? Why I took that suit to the cleaners just this morning, and I didn't notice any money in any of the pockets." said the woman.

"But I'm certain I left my money in the side right pocket of my new brown suit" the man said as he scratched his head in wonder.

"Now wait a minute! Are you saying I'm not right? Are you saying I'm wrong about this? Man oh, man oh, man!"

"You have a lot of nerve!" shrieked the woman.

"Let's not argue. We're here to look at cars, and that blue one in the corner is a right nice model. And just think. If we buy the new blue car, we'll never have to worry about our old brown one again. "

After looking at the price of the new blue car, and figuring out what they could get as a trade-in on their old brown one, the man and the woman decided buying a new car would be the right move for them. But before they left the store, they started questioning their decision. Would they be better off with the old brown car if the new blue one didn't run right? Or what about a new brown one? How long before they thought of the blue car as the old car? And would they ever feel blue about trading in their brown car? Blue or brown, old or new, what was right and which car did they want to be left with? The man and woman were so confused that they decided to sell their car and buy themselves bicycles. And that's just what they did. And they knew it was a right left right left.

## The Big Race

Narrator reads the following like a radio announcer with a lot of enthusiasm! The audience is divided into groups. As their assigned word is read in the story, they make the sound:

WHITE = Whiz!  
RED = Zoom!  
YELLOW = Zip!  
BLUE = Ca-Chunk!

The cars are ready.  
The flag us up.  
The race is set to go.  
The flag goes down,  
The cars are off...  
They're running toe to toe!  
The **white** is ahead.  
The **red** goes by.  
Here comes the **yellow** now.  
Here comes another one - it's **blue**.  
Whew, it sounds bad, wow!!  
The last lap now.  
The **red** is leading,  
The **yellow** and **white** close behind.  
I'm looking hard -- I see the **blue**.  
So far back, it's hard to find!  
The finish line is just ahead.  
That **blue** is coming up fast, I can't tell why ...  
The crowds on its feet ...  
They're yelling - The **white**, the **red**.  
The **yellow**, the **blue**,  
**HAVE ALL FINISHED IN A TIE!!**

## Songs

### Pinewood Derby Song

Tune: De Camptown Races

Cub Scouts all join in the song,  
Do-da, do-dah!  
Pine car track is mighty long,  
Oh, do-day-day!

#### CHORUS:

Going to run so fast,  
Going to get ahead,  
Bet my money on a blue pine car,  
Somebody bet on the red.

Black cars, blue cars, green and gray,  
Do-da, do-da!

Are running on the track today,  
Oh, do-da-day!

#### CHORUS

Pine cars do have lots of class,  
Do-da, Do-dah!  
Even though they don't use gas,  
Oh, do-da-day!

#### CHORUS

They're the pride of all the Dens,  
Do-da, do-da!  
Built by Cub Scouts and their friends,  
Oh, do-da-day!

#### CHORUS

## Cheers and Applauses

### Den Yells

Do three times, starting out softly, and ending up really loud.

We're from Den \_\_\_\_  
Couldn't be prouder.  
If you can't hear us,  
We'll yell a little louder.

#### Do once, LOUD!

United we stand.  
Divided we fall!  
Den \_\_\_\_  
Is best of all!

#### Do once, LOUD!

Look out!  
Here we come.  
Den \_\_\_\_  
Is on the run!

#### Do once, LOUD!

North, South,  
East or West,  
Den \_\_\_\_  
Is the best!

#### (LOUD, with ACTION!)

Clap your hands!  
Stomp your feet!  
For Den \_\_\_\_  
Can't be beat!

## Skits

### The Go Cart

**Need:** 2 scouts (1 participant is on hands and knees as the 'Go Cart').

Driver : Oh, this fool Go Cart is always giving me trouble ! Now the front wheel has come off. (Selects member of audience) Would you come over and give me a hand. Thanks. (Selected person may have some comments to respond to - then they are led to the cart.)

Driver : Here, if you would just be the wheel I need. That's right, get down on your hands and knees up there and be the front wheel. Now let me try it again. (Driver gets on car, tries to start it up.)

Go Cart: (Makes sputtering noises, starts, moves forward, then sags and sputters out.)

Driver : Now what is it ? (Driver moves to rear, lifts cart, lets go and cart sags again.)

Driver : Now that old suspension has gone, I need more help. (Selects someone else) Please come over here and be the suspension. That's right, just hold the back end up there. Now I'll try it again. (Gets on car, starts engine.)

Go Cart: (Sputters to life, moves forward, wobbles, and stops)

Driver : (Getting off) Oh, no. Now the rear wheel is loose. I'll go and get more help. (Selects more help) (New help is positioned at rear wheel.)

Driver: This wheel is loose. If you will just hold the wheel (indicates leg) tightly so it doesn't fall off, you'll be a big help. Thanks. (Driver gets on cart, starts engine)

Go Cart: (Starts up, runs fine, moves forward)

Driver : (Braking to halt) Oh, that's perfect now ! All I needed was a few NUTS to get it going !

### Milestones In Things That Go.

Here's a skit that has a special added attraction - the audience can join in the fun as they try to guess the famous names in transportation history.

To present this verse skit, you can use 10 Cub Scouts - one for the Narrator and one to deliver each verse. If you have fewer Cub Scouts, they can say more than one, just change the placard. Make a placard for each verse with the famous person's name printed on the back. Print the name large enough on the placard for the audience to see clearly. Attach the placard to the actor's back. After the actor has delivered his verse (allowing the audience a little time to try and guess the name of the person he represents), the actor turns around to reveal the name on the placard. The Narrator recites the first two verses. No costumes or scenery are required.

#### NARRATOR:

Transportation through the years  
Has changed, we are aware,  
Because some men had vision,  
And were not afraid to dare.

Although we see the evidence  
of all that they have done,  
Let's see if you can guess their names  
Presented, one by one.

**Cub 1.** We bet you don't know our name,  
But we first gave man his wings,  
As we soared aloft in a balloon  
And made men feel like kings!  
Who are we? (Montgolfier Brothers)

**Cub 2.** Until I came along and helped,  
Fast boats were just a dream,  
For I got rid of sails and oars;  
I gave the boat its steam!  
Who am I? (Robert Fulton)

**Cub 3.** I gave to life its "ups and downs,"  
So many men would say  
The elevators makes tall buildings  
Possible today.  
Who am I? (Elisha Otis)

**Cub 4.** As people peddle down the street,  
From grannies to little tykes,  
They all owe me a debt of thanks,  
'Cause I invented bikes!  
Who am I? (Pierre Lallement)

**Cub 5.** As trains crisscross the continents,  
My humble head is bowed.  
"Father of the locomotive" is  
The name of which I'm proud.  
Who am I? (George Stephenson)

**Cub 6.** As soon as you say "airplane,"  
Our name quickly comes to mind;  
But when we started, pilots were  
Quite difficult to find.  
Who am I? (Wright Brothers)

**Cub 7.** Though I did not invent it,  
I played a major part  
In mass-producing autos. I'd say

I gave the car its start!  
Who am I? (Henry Ford)

**Cub 8.** "Father of the modern rocket"  
Is the title I enjoy.  
So when he takes you to the moon,  
Remember, that's my boy!  
Who am I? (Robert H. Goddard)

**Cub 9.** I'll have a fuel-less motor  
That will hit the marketplace,  
And stop pollution of all kinds  
And go faster into space.  
Who am I? (You?)

## The New Car

Cast: Salesman, Buyer, 5 People to be Tires, Victim  
Setting: Car Showroom

4 of the tires are crouched in "tire" formation as on a car. The fifth is the spare tire at the back.

Salesman: Here, Sir, is our latest and best model. It also has an unbelievably low price. Let me show you the quality. (He "kicks" one of the tires -- tire falls flat and makes a hissing sound.) My, I'm so embarrassed. (He "kicks" another tire -- same thing happens. Start hamming it up, interacting more and talking with the buyer, apologizing profusely and being very embarrassed. Salesman successively kicks each tire until all 5 are kicked. Finally,)

Salesman: Hold on, let me get one of my men from the back. (Get your victim) Do you think you can fix these flats? (Instructs him to lift up each tire and so on, and each one rises to original position.) Well, I guess all that was needed was a nut to hold it up!

## Games

### Looking through the Window:

1. Try to find all the numbers from 1 to 100 in sequential order. Look for numbers on signs, count the number of a specific type of object(i.e. Cow. in one location, etc. The person who reaches 100 first wins.
2. Watch the oncoming cars. One person counts all the two-door cars. The other person counts all four door cars. The person who reaches 25 first wins.
3. Have each person with a good view from the window. Look for billboards, signs, posters, etc. Call out the letters of the alphabet in sequence from A to Z but only allow one letter per sign.
4. Play the same game as in (3. using objects instead of letters: i.e. A for ambulance, B for bike, C for church, etc.
5. Name the parts of your car that can't be seen starting from the letter A for air filter to Z.
6. Have an adult/leader make a list of animals that you might see while traveling. Give point value to the animals, the least points to the most likely to be seen and the most points to those least likely to be seen.
7. Watch out the window for pairs of things such as, two horses, two mailboxes, anything that comes together in pairs. The winner is the first to reach twenty pairs.
8. Pretend that each sign is only half a sign. Think of a good sentence to finish the half sign that you have.
9. Remember something that you have just seen outside the window. Give everyone a clue such as its size and color. Someone must guess what it is before you go two miles.
10. Have one person choose one side of the road and the other person, the other side. Give yourself a point every time an animal is seen and five points for a napping cat. See who has the most points after five minutes.
11. Have everyone choose a different color. When a person sees a car in his and says, "Paint It," five points is awarded. The first person to reach a 100 points wins.
12. Play these or other games by yourself as well and see how many points you can accumulate.
13. Look for license plates that have letters, write down the first ten letters that you see and try to make as many words as possible from those letters using each letter only once.
14. Watch for a license plate with three letters. Form the longest word possible with those letters in it.
15. Choose any word you like and then spell it out using license plates, one letter plate, as well as in order.
16. Search for numbers in order, one number per license plate. See who can get to fifty first.
17. Pick a number that has four digits such as 4250. Give yourself one point for finding it in order.

18. Using out-of-state license plate, name the state as soon as you can. A point is given to the first correct guess. Subtract one point if wrong. With commercial trucks having more than one plate, count only the top plate.
19. This game requires two people to play. While watching oncoming cars, one person counts license plates that end in even numbers and the other person counts license plates that end in odd numbers.
20. When driving through (or past) a city or town, each person in the car tries to guess how many people live in the community. After everyone has guessed check the road map which usually has population totals or a road atlas for the correct answer.
21. Each player takes a turn telling how he goes to Europe. He must go on something that will move and it must be seen as he rides in the car. Players drop out of the game when they cannot name something new. (Suggestions: bus, car, plane, boat, floating log, cloud, bird, fly, etc..)
22. Each Player selects a "destination" - a state far away from where the car is currently. Each player's destination state is different from the other players. By looking at the license plates of oncoming or passing cars, they try and find all the states they might pass through to reach their particular destination. They may take any sort of winding, out of the route - provided that it actually carries them in order from state to state as if they were actually driving. The first player to reach his destination first is the winner. This game works best on the interstate or major highways where it more likely to see license plates from different states. Disputes can be settled by consulting the map.
23. This game can be played in a couple of different ways. Players may take turns trying to identify the make of an oncoming car, winning a point for each correct identification. Instead of taking turns, the game may also be played with the first person to call out a guess winning one point if he is right or losing a point if he is wrong. Disputes can be handled by another person who isn't participating.
24. The players each make up a Bingo card with nine boxes. Each box has two numbers in it. These numbers ascend in value from left to right and descend in value from top to bottom. Another passenger observes the license plates of cars passing by and calls out the first two digits of each. When a player hears his number called, he crosses it out. The first player to cross out three numbers in a row - vertically, horizontally, or diagonally - is the winner.

### **Car Team Race**

Cubs stand in teams and are numbered. Each number is given the name of a car. When the number OR the name of the car is called out, they have to race to the end of the hall and back to their place, using the method they have been told. e.g.

1. Pinto - crawl
2. Volkswagen - hop
3. Jaguar - run
4. Buick - pigeon steps
5. Hummer - walk sideways
6. Porche – skip

### **Automobile Relay**

This is usually a pack event, but variations can make it usable for dens. For teams of eight players this is played like a relay race with the following variations: #1 has a flat tire, so he hops on his right foot. #2 has a flat tire, so he hops on his left foot. #3 can only go in reverse so he goes backwards. #4 has water in gas and goes two steps forward and one step backward. #5 must be cranked every fourth step, so he stops and cranks himself. #6 won't go, so #7 pushes him. #8 runs fine. Team to finish first wins.

### **Map Related Games**

For all the map related travel games, if you wish to use the map more than once, then cover the maps with transparent plastic shelf paper and use dry erase or water based markers.

Many of these games can be also played at home or in a den meeting as well in the car or other mode of transportation.

1. Looking at a road map, find all the names that have a color in them, start with A, have the name of an animal, etc.
2. Each person has a map. The adult/leader writes down the names of six cities that are on the maps. Each person tries to find the cities first and draws a circle around them.

3. Choose two cities that are far as far apart as you can find from each other on the map. Try drawing as many routes as possible between the two towns. Check to see which is the shortest and which is the longest.
4. Using the map for the area that you are traveling in, find the road you are on. Choose some landmark or town ahead of you and guess the time that you will arrive at that location. Have each person write down their answer and when that location is reached, check to see who is the closest.
5. Provide maps for every two people. One player chooses a place on the map. He tells the other people that he see a lake, city, etc., beginning with the first letter of the location. The other player has two minutes to find that location. The other player places his finger on the map and the first person tells him whether he is hot or cold.
6. Kim's Game for maps. Using a particular region on a map, have the players study it for one minute. Then have them try to list all the items, states, capitals, cities, lakes, rivers, etc. that are located in that region.
7. Make a Trip Tape. Either obtain a roll of adding machine tape or tape several narrow pieces of paper together. Look at a road map and mark the travel route; then list the names of the towns, cities, landmarks, etc. on the tape in the order to be traveled. Store the tape in a cardboard tube such as a toilet paper tube. Later, as you travel, unroll the tape and mark each place as you pass it by making an X or punching a hole.
8. Each player is given a copy of the same state or regional map. He is given three trips to take, each with a pair of cities as a starting and ending point. He must calculate the distance covered for each trip, add the distances together and come up with a grand total for the three trips. The mileage charts are then consulted and the correct figures are added together for the total. The player with closest total is the winner.

### **Silent Travel Games**

Some of these games can also be played at den or pack meetings as well as while traveling.

1. Write down all the sounds you hear in a five minute period while another person keeps time. Compare the list with another person.
2. The driver tells the participants when to start. The participants then raise their hand when they think that a mile has gone by. The driver will tell them who was the closest.
3. Choose someone to be the leader. He will do silent actions such as rub his head or pat his stomach. Copy all the leader's actions except when a car is passing. If the player is caught copying an action while a car is passing, that person is out. the last person out is the next leader.
4. Ask the driver to measure three miles. Choose a leader that will do silent thing that will make you laugh. Try not to laugh or make a sound for three miles. Choose a new leader.
5. Pretend there is a travel trunk in the back seat. Choose some piece of clothing from it and describe the piece of clothing in mime(pantomime.. Players can either call out or write down the answers.
6. A piece of paper is given to each person. They need to write something silly to act out on their paper. Put all the papers into a bag, hat, etc. One person will draw a slip and act it out. The others must not laugh or make a sound. Give everyone a turn.