The Complete Beginners Guide to Formula 1



If you're new to Formula One and fast cars fascinate you, we will bring you up to speed in this **Beginners Guide to Formula 1**. Formula One is an entrancing sport and it is quite easy to fall in love with it. As a beginner, you may feel a little bit like an outsider when other fans are discussing a driver, car, or race. That's nothing to worry about. In this article, we will give you enough knowledge to set you on your way to becoming an F1 fan.

Formula One is the fastest motorsport in the world, let us help you to find your feet in the F1 world with equal speed.

Here is our Beginners Guide to Formula 1...

The Beginners Guide to Formula 1: Formula 1 Explained

What is Formula One?

Formula One (F1) is a series of races held at different venues around the world, of the fastest open-wheel, open-cabin, single-seated, four-wheeled autos in the world. There have been a few years when even six-wheeled cars participated in F1.

The word 'Formula', included in the name, refers to a set of rules that the constructors of the car, its mechanics and the drivers have to strictly follow during the tenure that they are members of F1.

When motor racing first began, there were no limitations on the power or the size of the cars. The races became unequal with cars with more power and bigger sizes easily outpacing the smaller cars. The races also created dangerous situations in which many participants got seriously hurt, some even fatally.

When racing resumed after World War II, the governing body of the sport, the FIA, introduced a set of rules that set limits on the size and the power of the cars. This created an even playing field for the participants and drivers, while more stress was laid on the efficiency and design of the cars and also the capability of the drivers.

The word 'One' comes from the grading FIA issues to the racing tracks, the approved cars and the drivers' licences. The 'One' is also to distinguish F1 from street car racing and also to indicate that it is the ultimate in formula racing.

Formula One is governed by the Federation Internationale de l'Automobile (FIA) owned by the Formula One Group. The FIA, established on 20 June 1904, is a non-profit organisation and represents the interest of motoring organisations and motor car users.

The organisation amends, alters and introduces rules to Formula One so as to ensure the safety of the participants in the races, promote fair play, and ensure that the followers and spectators of Formula One get a good deal.

The History of Formula One

Formula One originated with the European Championship of Grand Prix races. Though the 'formula' or a set of rules was agreed to by several Grand Prix organisations before World War II, races were suspended during the war.

Formula One, a new set of rules, were agreed upon by the racing organisations in 1946. The first non-championship race was the Turin Grand Prix held the same year in Italy. The following year the World Drivers' Championship was formalised. Achille Varzi, an Italian driver, won the race in an Alfa Romeo.

The first world championship race was held in 1950 at Silverstone in the United Kingdom. Guiseppe Farina, an Italian driver in his Alfa Romeo, was the first driver to win the World Drivers' Championship that year.

Juan Manuel Fangio, an Argentinian driver and Farina's teammate, narrowly missed the championship title in 1950. But Fangio came back strongly to win 1951, '54, '55, '56 and '57 championship titles. His record of 5 championship titles was surpassed 45 years later when Michael Schumacher won his sixth World Driver's Championship in 2003.

The Constructors Championship was introduced in 1958. Then called the International Cup for F1 Manufacturers, the first cup in 1958 was won by Vanwall.

According to FIA, the Constructors Championship, "the constructor of an engine or chassis is the person (including any corporate or unincorporated body) which owns the intellectual rights to such engine or chassis."

That is the reason teams have had names such as McLaren-Renault in the past. It meant that while the chassis of the F1 car was built by McLaren, the engine was supplied by Renault. Both parties worked together to build a car suited to the tracks and their drivers.

Over the years there have been only five countries that have shared the Constructors' Championship between them. The countries are the UK leading with 33 championships, Italy (16), Germany (8), Austria (4) and France (3). Ferrari of Italy with 16 championships is the top constructor to date.

Formula One went through many changes in its rules. Most of the changes were aimed at minimising risk to the cars and drivers and increasing the spectator appeal of the sport. There were changes in engine sizes, car width and lengths, fuel tank sizes and the sizes of the tyres.

Those rules do not concern us. Suffice it to say that spectators are better off for the changes, the sport is more competitive and the participants are safer. We will go on to take a look at the cars which we are sure you are most interested in

Formula 1 Cars

Formula One is all about cars and every fan would like to know more about them. They are indeed a fascinating piece of machinery and a lot of effort goes into their construction. That is precisely why the Constructor's Championship is awarded at the end of every racing season.

Cars have evolved drastically over almost seventy years of Formula One. Today's cars are much safer and more manoeuvrable. The dynamics have improved and electronics has crept in substantially over the years. Because of that, drivers have better control over the cars resulting in better speeds and fewer accidents. However, F1 cars still have open wheels and open cockpits and are singleseated.

Formula 1 Car Design

Formula One cars are aerodynamically designed to provide the least resistance as they cut through the air. The feature not only helps them attain great speeds but also to consume less fuel as well as to get a better grip on the tarmac

Because of their aerodynamic design Formula cars attain a speed greater than that of an airliner at take-off. But the wings and the diffusers of the car produce a negative lift or a downforce that presses the car down upon the track. Or else, drivers would have little control over the cars as cars would be air-borne over the track because of the airlift.

A formula one car produces 5G of downforce on average. It means that five times the weight of the car is pressing down on the track. This gives the tyres traction and prevents the car from skidding on bends and sharp corners. The downforce also allows the drivers to take corners and bends at speeds much higher than we could in our road cars.

Formula 1 Engines

Since 2014, all F1 cars have 1.6L, V6 turbocharged engines. To those uninitiated, the number after 'V' stands for the number of cylinders on the engine. The number before 'L' represents the displacement volume in litres of all the cylinders of the engine taken together.

F1 cars are required to weigh a minimum of 746kgs without the driver and fuel in them. Constructors, along with the other members of the team including drivers, have to optimise the horsepower, torque and fuel efficiency to suit their requirements. That is why F1 cars' engines are fine-tuned for every F1 circuit.

Revolutions per minute or revs as we call it, for F1 car engines are limited to 15000 rpm. F1 cars are capable of speeds of up to 375 (235 mph) kilometres per hour. Juan Pablo Montoya hit a top speed of 372.6 kph (231.523 mph) during the Italian Grand Prix in 2005 while driving a McLaren-Mercedes car.

Formula 1 Tyres

Tyres play a big part in Formula One races. Pirelli is officially recognised as the tyre supplier by FIA for Formula One. Unlike street car tyres, Formula One car tyres are built to last only between 60 to 120 kilometres (40 to 80 miles)

Because one set of tyres will not last the distance of any F1 race, drivers have to make pit stops to replace tyres so that they can complete the races. Formula One car tyres are rated from C1 to C5 with C1 the hardest tyres and C5 the softest.

Until the conclusion of the 2021 season F1 used 13-inch tyres, however, from 2022 they moved to 18-inch tyres as part of a raft of new technical regulations designed to make the racing more even.

Formula 1 Teams

Participants in Formula One are not individuals but teams. You may not realise it, but each Formula One team employs hundreds of technicians, engineers and support staff. If you include the designers and the assembly employees, that number could well exceed one thousand.

There are ten teams enrolled for the 2022 Formula One season with two cars each. According to the rules for the season, a maximum of 26 cars will be allowed to compete. That would mean a maximum of 13 teams because each team is allowed to field two cars.

A formula One team comprises all the entities that design and produce the car and own the intellectual rights. Therefore if the chassis is designed by one company and the engine is supplied by another, the two taken together become the participating team. That is the reason you will hear names like Benetton-Ford or Williams-Renault.

Here is the list of F1 teams for 2022, along with their drivers:

- 1. Mercedes with Lewis Hamilton and George Russell
- Red Bull Racing with Max Verstappen and Sergio Perez
 Ferrari with Charles Leclerc and Carlos Sainz
- 4. McLaren with Lando Norris and Oscar Piastri
- 5. Alpine F1 Team with Esteban Ocon and Pierre Gasly
- 6. AlphaTauri with Yuki Tsunoda and Nyck de Vries
- 7. Aston Martin with Fernando Alonso and Lance Stroll
- 8. Williams with Alexander Albon and Logan Sargeant 9. Alfa Romeo Racing with Valtteri Bottas and Guanyu Zhou
- 10. Haas F1 Team with Kevin Magnussen and Nico Hulkenberg

As you can see from the above list, only one entity is listed as a team in each of the ten teams. It means that either the teams are constructing the cars by themselves or the engine and chassis builders have handed over the intellectual rights to the teams.

Formula 1 Drivers

Formula One drivers are as fit as most athletes in any sport. They have very high stamina and extremely good reflexes. Driving a race is very demanding both physically and mentally. That is why drivers dedicate a lot of time both during the season and otherwise maintaining their physical health and well-being.

All F1 drivers lose weight at the end of a race. That is because a lot of energy is spent by the drivers in working the brake and throttle pedals and concentrating on the track. Much energy is also spent when countering the G-force on the bends and sharp corners.

G-force is the force an F1 driver experiences when he accelerates or the car is going around a bend or a corner on the track. F1 drivers will experience a force of 2G when accelerating and up to 6G on a sharp corner. It means that the drivers are pulled by a force equal to 6 times their weight.

Although a drivers' body is firmly strapped in his seat, their neck, as well as their legs, are free to move. Keeping legs and neck in position under these high g-forces takes a lot of strength and effort. That is why F1 drivers assign a high priority to strengthen their neck muscles for high endurance.

Formula 1 Circuits

A Formula One circuit is a loop of a road that is approved by the FIA as a race track fit for F1 racing. A circuit usually starts with a straight stretch and has several turns and corners. Most circuits run in a clockwise direction. Those few that are anticlockwise give drivers the most trouble because of G-force on their necks in a direction that they are used to.

The average time taken for a race is 2 hours and the average distance of a circuit is 305 km (190 miles). But the distance varies in the length of the track from circuit to circuit as does the difficulty in negotiating the circuit. One round around a circuit is counted as one lap and races are usually specified as the number of laps of a particular circuit.

For example, Monaco is a slow circuit and the distance of the race is 260 km (161.7) miles. Monaco also has the shortest track length of 3.34 km (2.075 miles). Although the average length of a circuit

Here is a complete list of every Formula 1 circuit ever used.

Circuit	Type	Direction	Location	Length	Grand Prix	Years Used	Grands Held Circ
Adelaide Street	Street circuit	Clockwise	Adelaide, Australia	3.780 km (2.349 mi)	Australian Grand Prix	1985–1995	Circ
Ain-Diab Circuit	Road circuit	Clockwise	Casablanca, Morocco	7.618 km (4.734 mi)	Moroccan Grand Prix	1958	
Aintree Motor Racing Circuit	Road circuit	Clockwise	Aintree, United Kingdom	4.828 km (3.000 mi)	British Grand Prix	1955, 1957, 1959, 1961–1962	
Albert Park Circuit	Street	Clockwise	Melbourne, Australia	5.303 km	Australian	1996–2019	
Algarve International	circuit Race	Clockwise	Portimão, Portugal	(3.295 mi) 4.692 km	Grand Prix Portuguese		
Circuitdagger Autódromo do Estoril	circuit Race	Clockwise	-	(2.915 mi) 4.360 km	Grand Prix Portuguese	1984–1996	
Autodromo do Estorii Autodromo Enzo e	circuit Race	Anti-	Cascais, Portugal	(2.709 mi) 4.933 km	Grand Prix Italian		
Dino Ferraridagger	circuit	clockwise	Imola, Italy	(3.065 mi)	Grand Prix San Marino Grand Prix	1980–2006	
Autódromo	Race	Claria.	Maria Cita Maria	4.304 km	Emilia Romagna Grand Prix Mexican	10/2 1070 100/ 1002 2015 2010	
Hermanos Rodríguez Autódromo	circuit	Clockwise	Mexico City, Mexico	(2.674 mi)	Grand Prix	1963–1970, 1986–1992, 2015–2019	
Internacional Nelson Piquet	Race circuit	Anti- clockwise	Rio de Janeiro, Brazil	5.031 km (3.126 mi)	Brazilian Grand Prix	1978, 1981–1989	
Autódromo José Carlos Pace	Race circuit	Anti- clockwise	São Paulo, Brazil	4.309 km (2.677 mi)	Brazilian Grand Prix	1973–1977, 1979–1980, 1990–2019	
Autódromo Juan y Oscar Gálvez	Race circuit	Clockwise	Buenos Aires, Argentina	4.259 km (2.646 mi)	Argentine Grand Prix	1953–1958, 1960, 1972–1975, 1977 –1981, 1995–1998	
Autodromo Nazionale	Race	Clockwise	Monza, Italy	5.793 km	Italian	1950–1979, 1981–2019	
Monzadagger AVUS	circuit Road	Anti-	Berlin, Germany	(3.600 mi) 8.300 km	Grand Prix German	1959	
Bahrain International	circuit Race	clockwise	•	(5.157 mi) 5.412 km	Grand Prix Bahrain		
Circuitdagger	circuit Street	Clockwise Anti-	Sakhir, Bahrain	(3.363 mi) 6.003 km	Grand Prix European	2004–2010, 2012–2019	
Baku City Circuit	circuit	clockwise	Baku, Azerbaijan	(3.730 mi)	Grand Prix	2016–2019	
					Azerbaijan Grand Prix		
Brands Hatch	Race circuit	Clockwise	West Kingsdown, United Kingdom	3.703 km (2.301 mi)	British Grand Prix European	1964, 1966, 1968, 1970, 1972, 197 4, 1976, 1978, 1980, 1982–1986	
Buddh International	Race			5.141 km	Grand Prix Indian		
Circuit	circuit Race	Clockwise	Greater Noida, India	(3.194 mi) 4.430 km	Grand Prix French	2011–2013	
Bugatti Circuit	circuit	Clockwise	Le Mans, France	(2.753 mi)	Grand Prix	1967	
Caesars Palace Grand Prix Circuit	Street circuit Road	Anti- clockwise	Las Vegas, United States Saint-Genès-	3.650 km (2.268 mi) 8.055 km	Caesars Palace Grand Prix French	1981–1982	
Charade Circuit	circuit	Clockwise	Champanelle, France	(5.005 mi)	Grand Prix	1965, 1969–1970, 1972	
Circuit Bremgarten	Road circuit	Clockwise	Bern, Switzerland	7.208 km (4.479 mi)	Swiss Grand Prix	1950–1954	
Circuit de Barcelona- Catalunyadagger	Race circuit	Clockwise	Montmeló, Spain	4.655 km (2.892 mi)	Spanish Grand Prix	1991–2019	
Circuit de Monaco	Street circuit	Clockwise	Monte Carlo, Monaco	3.337 km (2.074 mi)	Monaco Grand Prix	1950, 1955–2019	
Circuit de Spa- Francorchampsdagger	Race circuit	Clockwise	Stavelot, Belgium	7.004 km (4.352 mi)	Belgian Grand Prix	1950–1956, 1958, 1960–1968, 197 0, 1983, 1985–2002, 2004–2005, 20 07–2019	
Circuito de Monsanto	Street circuit	Clockwise	Lisbon, Portugal	5.440 km (3.380 mi)	Portuguese Grand Prix	1959	
Circuit de Nevers Magny-Cours	Race circuit	Clockwise	Magny-Cours, France	4.411 km (2.741 mi)	French Grand Prix	1991–2008	
Circuit Gilles Villeneuve	Street circuit	Clockwise	Montreal, Canada	4.361 km (2.710 mi)	Canadian Grand Prix	1978–1986, 1988–2008, 2010–2019	
Circuit Mont- Fremblant	Race	Clockwise	Mont- Tremblant, Canada	4.265 km	Canadian Grand Prix	1968, 1970	
Circuit of the Americas	Race circuit	Anti- clockwise	Austin, United States	(2.650 mi) 5.513 km (3.426 mi)	United States Grand	2012–2019	
Circuit Zandvoort	Race circuit	Clockwise	Zandvoort, Netherlands	4.252 km (2.642 mi)	Prix Dutch Grand Prix	1952–1953, 1955, 1958–1971, 1973 –1985	
Circuit Paul Ricard	Race	Clockwise	Le Castellet, France	5.842 km (3.630 mi)	French Grand Prix	1971, 1973, 1975–1976, 1978, 198 0, 1982–1983, 1985–1990, 2018–20 19	
Circuit Zolder	Race circuit	Clockwise	Heusden- Zolder, Belgium	4.262 km (2.648 mi)	Belgian Grand Prix	1973, 1975–1982, 1984	
Circuito da Boavista	Street	Anti- clockwise	Porto, Portugal	7.775 km	Portuguese Grand Prix	1958, 1960	
Circuito de Jerez	Race	Clockwise	Jerez de la	(4.831 mi) 4.428 km	Spanish	1986–1990, 1994, 1997	
	circuit	STOCKWISE	Frontera, Spain	(2.751 mi)	Grand Prix European Grand Prix		
Circuito del Jarama	Race circuit	Clockwise	San Sebastián de los Reyes, Spain	3.404 km (2.115 mi)	Spanish Grand Prix	1968, 1970, 1972, 1974, 1976–197 9, 1981	
Dallas Grand Prix	Street	Anti- clockwise	Dallas, United States	3.901 km	Dallas Grand Prix	1984	

Detroit street circuit	Street	Anti- clockwise	Detroit, United States	4.168 km (2.590 mi)	Detroit Grand Prix	1982–1988	
Dijon-Prenois	Race circuit	Clockwise	Prenois, France	3.886 km (2.415 mi)	French Grand Prix Swiss Grand	1974, 1977, 1979, 1981–1982, 1984	
					Prix		
Donington Park	Race circuit	Clockwise	Castle Donington, United Kingdom	4.020 km (2.498 mi)	European Grand Prix	1993	
Fuji Speedway	Race circuit	Clockwise	Oyama, Japan	4.563 km (2.835 mi)	Japanese Grand Prix	1976–1977, 2007–2008	
Long Beach Street Circuit	Street circuit	Clockwise	Long Beach, United States	3.275 km (2.035 mi)	United States Grand Prix West	1976–1983	
Hanoi Street	Street	Anti-	Hanoi, Vietnam	5.607 km	Vietnamese		
Circuitdagger Hockenheimring	Race circuit	clockwise Clockwise	Hockenheim, Germany	(3.484 mi) 4.574 km	Grand Prix German Grand Prix	1970, 1977–1984, 1986–2006, 200 8, 2010, 2012, 2014, 2016, 2018–20	
Hungaroringdagger	Race	Clockwise	Mogyoród, Hungary	(2.842 mi) 4.381 km	Hungarian	19 1986–2020	
Indianapolis Motor	circuit Race	Clockwise	Speedway, United	(2.722 mi) 4.192 km	Grand Prix Indianapolis	1950–1960, 2000–2007	
Speedway	circuit	CIOCATIA	States	(2.605 mi)	500[a] United States Grand Prix	1,550 1,500,2000 2007	
Istanbul Park	Race	Anti-	Istanbul, Turkey	5.338 km	Turkish	2005–2011	
Korea International Circuit	circuit Race circuit	clockwise Anti- clockwise	Yeongam, South Korea	(3.317 mi) 5.615 km (3.489 mi)	Grand Prix Korean Grand Prix	2010–2013	
Kyalami Racing	Race	Anti-	Midrand South Africa	4.200 km	South African	1967–1980, 1982–1985, 1992–1993	
Circuit	circuit	clockwise	Midrand, South Africa	(2.610 mi)	Grand Prix	1907-1900, 1982-1983, 1992-1993	
Marina Bay Street Circuit	Street	Anti- clockwise	Singapore	5.063 km (3.146 mi)	Singapore Grand Prix	2008–2019	
Montjuïc circuit	Street circuit	Anti- clockwise	Barcelona, Spain	3.791 km (2.356 mi)	Spanish Grand Prix	1969, 1971, 1973, 1975	
Mosport International Raceway	Race circuit	Clockwise	Bowmanville, Canada	3.957 km (2.459 mi)	Canadian Grand Prix	1967, 1969, 1971–1974, 1976–1977	
Mugello Circuitdagger	Race circuit	Clockwise	Scarperia e San Piero, Italy	5.245 km (3.259 mi)	Tuscan Grand Prix		
Nivelles-Baulers	Race circuit	Clockwise	Nivelles, Belgium	3.724 km (2.314 mi)	Belgian Grand Prix	1972, 1974	
Nürburgringdagger	Race circuit	Clockwise	Nürburg, Germany	5.148 km (3.199 mi)	German Grand Prix	1951–1954, 1956–1958, 1961–196 9, 1971–1976, 1984–1985, 1995–20 07, 2009, 2011, 2013	
					European	07, 2007, 2011, 2013	
					Grand Prix Luxembourg		
					Grand Prix Eifel Grand Prix		
Pedralbes Circuit	Street circuit	Clockwise	Barcelona, Spain	6.316 km (3.925 mi)	Spanish Grand Prix	1951, 1954	
Pescara Circuit	Road	Clockwise	Pescara, Italy	25.800 km	Pescara	1957	
Phoenix street circuit	Street	Anti-	Phoenix, United States	(16.031 mı) 3.720 km	Grand Prix United States Grand	1989–1991	
Floelix street circuit	circuit	clockwise	Filoenix, Officed States	(2.312 mi)	Prix	1909-1991	
Prince George Circuit	Race circuit	Clockwise	East London, South Africa	3.920 km (2.436 mi)	South African Grand Prix	1962–1963, 1965	
Red Bull Ringdagger	Race circuit	Clockwise	Spielberg bei Knittelfeld, Austria	4.318 km (2.683 mi)	Austrian Grand Prix	1970–1987, 1997–2003, 2014–2020	
			,	,	Styrian Grand Prix		
Reims-Gueux	Road circuit	Clockwise	Gueux, France	8.302 km (5.159 mi)	French Grand Prix	1950–1951, 1953–1954, 1956, 1958 –1961, 1963, 1966	
Riverside International	Race circuit	Clockwise	Moreno Valley, United States	5.271 km (3.275 mi)	United States Grand	1960	
Raceway Rouen-Les-Essarts	Road circuit	Clockwise	Orival, France	6.542 km (4.065 mi)	Prix French Grand Prix	1952, 1957, 1962, 1964, 1968	
Scandinavian Raceway	Race	Clockwise	Anderstorp, Sweden	4.031 km (2.505 mi)	Swedish Grand Prix	1973–1978	
Sebring International Raceway	Road	Clockwise	Sebring, United States	8.356 km (5.192 mi)	United States Grand	1959	
Sepang International	Race	Clockwise	Sepang, Malaysia	(5.192 ml) 5.543 km	Prix Malaysian	1999–2017	
Circuit Shanghai	circuit Race	Clockwise	Sepang, Manaysia	(3.444 mi) 5.451 km	Grand Prix Chinese	1999-2017	
International Circuitdagger	circuit	Clockwise	Shanghai, China	(3.387 mi)	Grand Prix	2004–2019	
Silverstone Circuitdagger	Race circuit	Clockwise	Silverstone, United Kingdom	5.891 km (3.660 mi)	British Grand Prix	1950–1954, 1956, 1958, 1960, 196 3, 1965, 1967, 1969, 1971, 1973, 19 75, 1977, 1979, 1981, 1983, 1985, 1 987–2019	
Circuitdaggei					70th		
Circuitaggei					Anniversary Grand Prix		
Sochi Autodromdagger	Race circuit	Clockwise	Sochi, Russia	5.848 km (3.634 mi)		2014–2019	

Suzuka Circuit	Race circuit	and part anti- clockwise (figure eight)	Suzuka, Japan	5.807 km (3.608 mi)	Japanese Grand Prix	1987–2006, 2009–2019	31
Okayama International Circuit	Race circuit	Clockwise	Mimasaka, Japan	3.703 km (2.301 mi)	Pacific Grand Prix	1994–1995	2
Valencia Street Circuit	Street circuit	Clockwise	Valencia, Spain	5.419 km (3.367 mi)	European Grand Prix	2008–2012	5
Watkins Glen	Race circuit	Clockwise	Watkins Glen, United States	5.430 km (3.374 mi)	United States Grand Prix	1961–1980	20
Yas Marina Circuitdagger	Race circuit	Anti- clockwise	Abu Dhabi, United Arab Emirates	5.554 km (3.451 mi)	Abu Dhabi Grand Prix	2009–2019	11
Zeltweg Airfield	Road circuit	Clockwise	Zeltweg, Austria	3.186 km (1.980 mi)	Austrian Grand Prix	1964	1

Pits and Pit Stops

Pit stops are essential for cars to change tyres and for making repairs, mechanical adjustments, refuelling or as a penalty. Refuelling is not allowed in F1 for now. However, drivers have to make at least one pit stop to change tyres because F1 tyres are designed to last much less than the distance of one race.

Pits are located at the side of racing lanes and they are assigned in the order of qualifying rankings of the team. A pit may have even up to twenty mechanics who prepare for all eventualities one lap before the car makes a pit stop.

Drivers make a call on taking a pit stop depending on the state of their tyres and any mechanical repairs or adjustments their car might need. The team leader in the pit will usually remind the driver that he has to make a pit stop one lap before a pre-scheduled stop. The less the number of pit stops drivers make, the more advantage they get in race times.

Formula 1 Seasons

A season of Formula One consists of a number of Grands Prix conducted over the course of a year. The F1 season usually starts in March and ends in December. There are 23 venues across the world where the Grands Prix are held.

The 2023 FORMULA 1 calendar will feature 23 races, including a debut race at the new street circuit in Las Vegas.

The Chinese Grand Prix has once again been removed from the calendar due to the covid testing and isolation requirements that would not suit the needs of F1.

At the end of the F1 season, the World Drivers' Championship and the Constructors' Championship are awarded to the winners. The drivers' championship is decided by the cumulative number of points the driver has accumulated in that season. The constructors' championship goes to the team with the highest total of the points accumulated by both its drivers during the season.

Slang Terms Used in Formula One

Now that you have got the hang of what F1 is about let us go to some of the slang used in F1. The words listed below are some of the technical jargon used by team staff and commentators. Once you know them, you will be in a better position to understand what some 'expert commentators' are talking about when they say 'marbles' and 'polesitter'

Trailing drivers are often lapped by the leading drivers. The trailing drivers are referred to as backmarkers just as we refer to back benchers in schools and colleges.

Blistering/Graining

Blistering is when the cold surface of the track causes pieces to blow out of the tyre surface because the inside of the tyre is warmer. Graining is just the opposite. It is a situation when the tyres are cold and the hotter surface outside causes the rubber chunks to come off and stick to the tyre.

Bottoming Out

When the underside of the car comes in contact with the track, it is referred to as bottoming. It happens because of uneven tracks and in cases of sudden rise or crest. You get a shower of sparks when a car bottoms out because F1 cars use titanium skid blocks underneath their chassis.

'Box' is a reminder to the drivers coming from a controller in the pits that they have a pit stop coming during the lap or in the next lap. The word is derived from the German word 'Boxenstopp' which means a pit stop.

Brake bias is what allows the drivers to adjust the difference between how much the front wheels and the rear wheels brake. Normally, both the front and rear wheels will break equally when the driver pushes down on the brake pedal. In wet conditions, the driver may want to increase the braking in the rear tyres and reduce it in the front wheels.

Drivers adjust brake biases throughout the course of a race to balance the car depending on the condition of the tyres and the amount of fuel left in the tanks.

Dirty Air/Clean Air

Dirty air is the turbulent air left in the wake of the preceding car. The car coming in the wake of the leading car will experience a drag because of the dirty air. Clean air is the undisturbed air encountered by a car speeding all on its own. The air flows smoothly around the car's streamlined surface but leaves dirty air in its wake.

Drag Reduction System (DRS) is allowed to be used in only marked zones on the track. Turbulent air behind the leading car can lead to a drag on the car following it closely, reducing the downforce. A flap on the car is then used to reduce the drag and increase the downforce which can help the car in overtaking on a straight.

Falling Off the Cliff

Falling off the cliff describes the situation when the tyre compounds deteriorate unusually rapidly during the race. The slows down the car and renders it uncompetitive. Drivers say "my tyres fell off the cliff and I had to pit stop early" to describe their predicament.

When a car driver locks his front brakes, the front tyres skid along the surface of the track rather than roll across it. This wears the tyres giving it a prominent flat spot. A flat spot on the tyres results in unscheduled pit stops spoiling the chances of the driver in the race

A green track is an almost unused track that drivers encounter on the first day of practice. The track has little rubber laid down onto it affording the cars less than optimum traction on the dry.

Lift and Coast

If a driver feels that he is going to run out of fuel before the end of the race, he has to conserve his fuel. The driver then lifts off the throttle and cruises. The driver is said to be 'lifting and coasting' into the braking zone at the cost of speed.

Marbles

Tiny pieces of rubber that are shredded off the tyres while cornering are called marbles. They accumulate off the racing line and driving on them can be dangerous as the car loses traction.

Oversteer/Understeer

When a car is cornering and the rear wheels of the car lose grip and step out of line, the driver is said to have oversteered. On the other hand, if the front wheels lose grip and the car takes a shallower turn than the driver intended, the car has been understeered

Polesitter

A polesitter is the driver who sets the fastest lap in Q3 of the qualifying sessions. Pole sitters have an advantage if they get away from the pack and hold the lead into the first corner.

Power Unit

The engine of a modern-day F1 car has 'power units' rather than just engines as in the olden days. This unit consists of six components. The Internal Combustion Engine (ICE), the Turbo Charger (TC), the Motor Generator Unit - H (MGU-H), Motor Generator Unit - Kinetic (MGU-K), the Energy Store (ES) and the Control Electronics (CE) taken together is called the Power Unit. These components combine to give an F1 car just below 1000 bhp of power.

Tankslapper

A driver is said to have got a tankslapper when a sideways movement causes the rear end of the car to step out of line.

Why Should You Attend a Grand Prix?

Each Grand Prix is held over three days, from Friday to Sunday, except in Monaco where the Friday practice sessions are held on a Thursday. The action starts on Fridays and culminates in the crowning event, the race on Sundays. Between Friday and Sunday, there are practice and qualifying sessions that set the scene for the race on Sunday.

Practice Sessions

Practice sessions usually start on Fridays and last till Saturday mornings. If the races are scheduled to be held at night, the timings of the practice sessions may vary. Practice sessions are for individual teams and their drivers to familiarise themselves with the track and fine-tune their cars.

During practice sessions, the drivers will try out different types of tyres on the track to find out how long they last. They will also keep a close watch on their fuel consumption with different tyres and tune their engines accordingly.

Drivers use the practice sessions to get a good feel of the track and the car. They will use this knowledge to get a good position in the qualifying rounds. Watching the practice sessions will let you identify the different cars and drivers during the race. It also gives you a chance to watch all the behind the scenes activities.

Qualifying sessions are the most exciting experience you will get on a racing weekend. Generally held on Saturday afternoons, there are three qualifying phases Q1, Q2 and Q3. During qualifying sessions, drivers will push their machines to the brink in order to get a good position on the grid.

In O1, or the first qualifying round all the 20 cars (if there are 20 cars participating) will take part. The five cars finishing last will be eliminated from any further qualification sessions. They will take the grid positions from 16 to 20 depending on their timings in Q1.

The remaining 15 cars will participate in the Q2 session. In this session a further five cars that finish last will be eliminated from the last qualifying session. They will take grid positions according to their performance in the Q2 session.

Q3 is the last qualifying session and decides the grid position for the remaining 10 cars. In this session, drivers will really work their throttles during this session in a bid to win the pole position. The pole position is considered a distinct advantage. The polesitter gets an unencumbered track and clean air to take a lead which many times tends to be unassailable.

That is why qualification sessions are considered to be the most exciting time of a racing weekend.

The Race

After the grid is set in qualifying, barring any penalties either for wrongdoing or technical changes to the car, the grid will start how they ended qualifying.

The cars come out early for an installation lap, then grid up, where they are assessed by the team, and the drivers have an anxious wait as the clock ticks down until the race begins. During this time some will be interviewed, some listen to music, and drivers like the affable Kimi Raikkonen avoid eye contact with anyone as they get into the zone

After a 'parade lap' of the drivers being driven around the track to wave to the crowd, they fire up the cars and complete a warm-up lap behind the safety car.

At the completion of the warm-up lap, the starter waits for the signal, then it's lights out and away we go!

The first corner is always a nerve-jangling time, more so for team bosses and those of us watching, than it is for the drivers.

After a frantic opening lap, it is then time to settle down and race to the chequered flag.

Things Taking Place During a Racing Weekend

Support races feature in most GP weekends. Young drivers who are tomorrow going to take the place of F1 drivers compete in F2 and F3 races. These races can be quite intense and make for good watching. You never know if you can spot a youngster who might feature in the next year's FI race.

If you are just getting familiar with F1 and happen to attend a F1 weekend, try not to miss the pit lane walk experience. A pit lane walk will give you a fair idea of what work goes on behind the scenes in F1.

You will see drivers and mechanics fine tuning their cars for the race. You may even get a chance to take a selfie with a F1 driver or a mechanic of your favourite team. Pit lane walks are however high in demand and you will have to buy tickets that include pit lane walks.

Get to Know F1 Better

When you are new to Formula One, it is easy to feel left out and you are left wondering when you will gain some level of expertise in the sport. There are plenty of forums on the internet where you can greatly enhance your knowledge on F1.

Here is a list of places where you can increase your F1 knowledge quickly

- r/formula1 (Reddit)
- r/F1 Technical (Reddit)
 Formula 1 Fans (Quora)
- Formula 1 Grid Talk Podcast

After reading through this Beginners Guide to Formula 1 you're now up to speed with the intricacies of the sport, so it's time to choose your favourite team and driver!

If you enjoyed this guide, please take a moment to share it with your friends, and make sure you tune in to the Formula 1 Grid Talk Podcast to keep up to date.