

INTRODUCTION

Did you buy this book because you wanted to know about Formula Racing? No problem ; we will give you a short introduction to what Formula Racing is.

Formula Racing is a motorsport of thin, light cars with open cockpits for drivers.

Every year there is an official F1 Grand Prix Hosted by the FIA (Federation International D'Automobile, whom you can read more about in *Strategy and Profits Garage*).

There are 11 teams as of the 2026 season.

The most famous teams are Ferrari, Mercedes, and Williams Racing, Red Bull, etc.

Each team has 2 cars, which they build by themselves, and 2 drivers.

The current famous drivers are Max Verstappen, Andrea Kimi Antonelli, Lando Norris and more.

Each team gets points with which they can win.

Cars are built with the most high tech materials, like Aerofoil and Titanium. To find out more, turn the page.

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Aerodynamics

First of all, what is aerodynamics - the air doing gymnastics? Umm, no. Aerodynamics is the study of how air moves around objects and how that movement affects them. In simple words:

It explains how air pushes, pulls, or flows around things that move, like cars, bikes, airplanes, or even a football. Aerodynamics is how air decides to be annoying.

Aerodynamics is the most crucial part of F1 Design



So we make cars, bikes, and planes **smooth and pointy** so air goes: "Oh okay, I'll just slide past!"



If air hits you hard → you go slow.

If air slips nicely around you → *Speed!*

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streets of Pau 🏎️. Did you know the Grand Prix in French means a Grand Prize 🏆 ? In this race the prize was awarded to the fastest heavy car. The rumbles of these cars on these very streets you are seeing is where our racing world was first created. As you can see the flag was waved and these early petrol vehicles rumbled their engines . These moments are what marked the creation of our world. Did you know the Grand Prix 's winner was Maurice Farman! Who was not only a racer but an aviator, French aircraft designer and manufacturer. The Grand Prix was a significant part of racing history.

1904

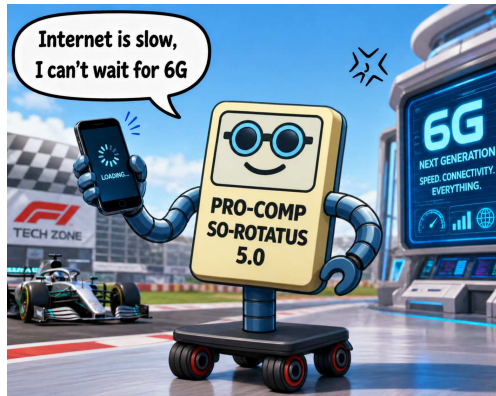


Now let us move forward in time. Past -O -meter voice, "Teleporting you to 20th June 1904 in France." Now come on, drivers ride into the meeting that laid the foundation for the creation of Federation Internationale de l'

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What is 5G and 4G anyway?

5G and 4G stand for **5th Generation** and **4th Generation**. They



are basically different versions of internet connection with different download rates and internet speed. 4G download rate is ~2.5 MB/s and there's a 30-50 millisecond delay in loading a page

in optimal conditions. 5G download rate is ~25 MB/s and there's usually only around a 10 millisecond internet delay.

Fun fact: On 4G, it takes roughly 7 minutes to download a normal high definition movie, whereas on 5G, it takes only 6 seconds!

When F1 started testing and exploring technologies like 5G for faster data communication, telecom companies' 5G also gained more attention and more customers bought 5G phones.

Computers in Pit stops

Computers are also extensively used in pit stops. Pit stops are when the car enters the pit area for changing wheels or other

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Quiz

Q. What were the first computer simulations for?

_____.

Q. How much RAM does an F1 car's computer contain?

_____.

Q. What is the term for sending data wirelessly from the car?

_____.

Q. Which sensor in an F1 Car tracks air pressure and speed?

_____.

Q. What is the download rate for 5G? _____MB/s.

Q. 5G stands for 5th _____.

Q. The _____ engineer analyzes lap speed and turn speed.

Q. A professional pit stop takes less than _____ seconds.

Q. DPPS stands for _____ Points Per Second

Q. Apart from real crashes, teams use _____.

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Drivers are athletes; they need to be in shape to drive these cars.

It gets really hot inside the cockpit.

The temperatures can get extremely high when they are driving.

To protect themselves drivers wear suits, helmets, gloves and other safety equipment.

When they are racing they have to steer the car, brake, accelerate and stay focused, for a time.

All this hard work makes their bodies hot. This heat makes them sweat. They lose water. So drivers need to drink water to stay hydrated.

If a driver is tired they can make mistakes. If a driver is cool and focused they can drive really well. The way heat and energy work, which is called thermodynamics, affects the car and the driver.

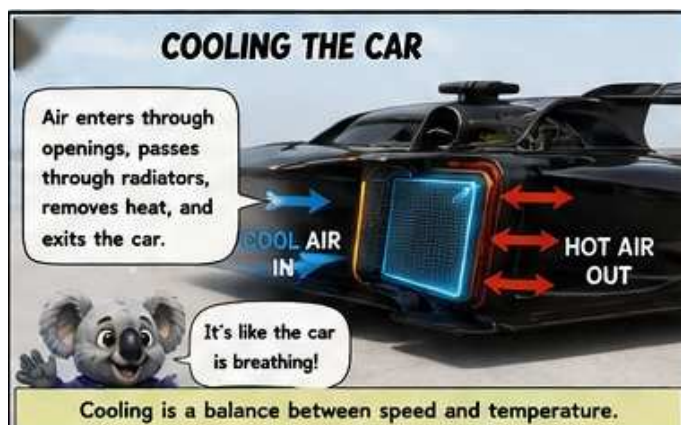
Thermodynamics affects not the car but also the person driving the Formula 1 car.

Drivers can lose 3 kilograms during a hot race weekend, which is a lot of weight to lose in just a few days.

Back to Heat

If the car gets too hot, there will be problems.

The car needs a cooling system.



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suddenly ran much hotter. Teams spent the entire 1958 season redesigning

their engine cylinders and pistons so they wouldn't literally melt from the

heat of the AvGas.

A Level Playing Field: It stopped teams with better chemical labs from having

an unfair advantage, forcing everyone to compete using the exact same base

fuel.

With so many issues, AvGas only lasted until 1960.

In a desperate effort to make it better, FIA decreed that starting in 1961, F1

cars would use normal commercial grade fuel- literally the same petrol you

would get at a roadside gas station. On the track, 1960 marked the absolute

death of front engined F1 cars. Cooper-Climax(A legendary British racing car

that revolutionised F1 in the late 1950s) ,had dominated the 1959 and

Suzuka is one of the rare circuits that form a figure-eight shape, as one part of the circuit passes over another using a bridge. Such a design gives rise to a rhythm that racers need to understand.

"Turns of S" require smooth driving and impeccable timing. Every step, whether braking, accelerating, or handling the wheel, must



be calculated precisely.

Consistency and accuracy will get you through here. While street races offer speed, Suzuka gives it

to those who remain balanced.

Passionate and respectful Japanese fans are what make the race even more exciting.

Suzuka is a track where:

accuracy is key.

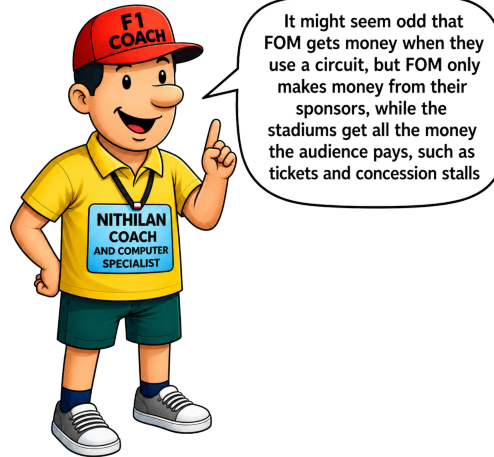
Autodromo Nazionale Monza

Welcome to Autodromo Nazionale Monza 🇮🇹, also called the Temple of Speed.

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What the FOM really does

- The FOM releases the Formula One rights bundle for broadcasting. This is currently held by Apple TV in the USA and FanCode in India.
- They manage F1 TV, the OTT which shows F1 Races.
- They collect and manage the telemetry data from the cars
- They collect money (Can be upto \$60 million!) from the circuit stadiums which host F1 Grand Prixes.



What the FIA does

- The FIA basically established modern F1 Racing.
- They started the Grand Prixes.
- They made the rules and set the regulations.

The FIA used to do everything the FOM does now too, but because of a European Commission ruling in the 1990s, they had to separate their regulatory and commercial actions into 2 separate entities. The FOM was first founded as FOPA (Formula



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you what a Magni- Lens Story is . It is a mystery story on detective Amrita and her investigations. I will give you clues so you can decide on the culprit . Lenter show an image of Amrita;



Story: It was a bright sunny day, when detective Amrita was at her office .

When suddenly she gets a call saying that there's been a thievery at a circuit station . She went to the crime site to understand that a lady named Sushma 's golden necklace had been stolen . She said that she had her necklace there until the cars passed by. She interrogated the viewers next to Sushma, Shyam, Sohan and Nitya . Shyam said, "I was talking to the race helper ." Nitya said , "I was looking at my mobile. " Sohan said, "I was in the washroom and I was on my way back to my seat. She also finds a shoe print near Sushma 's seat. It was towards Shyam and Sohan 's seat. Who was the culprit ?

Ans _____

MAGNI-LENS STORY 1

Since we have done too much camera knowledge let's have a short break with Magni-Lens Story.

It is a mystery story on detective Amrita and her investigations.

Lenter show an image of Amrita.

Story: It was a bright sunny day, when detective Amrita was at her office. When suddenly she gets a call saying that there's been a thievery at a circuit station. She went to the crime site to understand that a lady named Sushma's golden necklace had been stolen. She said that she had her necklace there until the cars passed by.

She interrogated the viewers next to Sushma...



SUSHMA



SHYAM



NITYA



SOHAN

I was talking to the race helper.

I was looking at my mobile.

I was in the washroom and I was on my way back to my seat.

She also finds a shoe print near Sushma's seat.



It was towards Shyam and Sohan's seat. Who was the culprit?

Ans: SHYAM

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He started 33 World Championship Grands Prix, winning 13 races, securing 17 podiums, 14 pole positions, and setting 12 fastest laps. His back-to-back Formula 1 Championships in 1952 and 1953 made him the dominant driver of his era and Ferrari's first Formula 1 Champion. Ascari's record of seven consecutive Grand Prix victories (set across the 1952 and 1953 seasons) remained unmatched for decades. Ascari's success marked Ferrari's first major breakthrough in Formula 1 and helped establish the team's long-term presence in the sport. Ascari died on 26 May 1955, at age 36, after crashing during a test at Monza in the Curva del Vialone corner. The incident eerily mirrored his father's fate: both died at the age of 36, both in racing crashes, and both near Milan. His name lives on in Formula 1 history, and the Ascari chicane at Monza is named in his honour.

Mike Hawthorn

Mike Hawthorn loved life, drove fast and died young. Big, blond and boisterous, he often raced wearing a broad grin and a bow tie. He regarded motorsport as a quick way to further the fun he constantly pursued.



When his pastime became a profession he partied as hard as he drove, though his career was also tinged by tragedy, scandal and personal misfortune. Near the end he found Formula 1 racing no fun at all, but he went out a winner. Other champions were greater drivers but none was a more colourful personality.

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	in fact masked the hidden depths in one of the most original.
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Jokes

Why did the Red Bull car go to the gym?

To improve its downforce. You get it?

What was Ferrari's race plan:

1: Make a strategy. Ok understandable

2: Change the strategy. Last moment change

3: Forget the strategy. and win

It's just a joke, we're also Ferrari fans, especially Charles Leclerc is the G.O.A.T and also Max Verstappen and Sir Lewis Hamilton on the top.

People guess who's next..... SIR LEWIS HAMILTON yay!



Distance

Jaskirat: "Alright, we already learned about speed... but speed alone is useless if you don't know how far you're actually travelling."

Igloo: "Exactly. Distance tells us how much ground something covers while moving. In racing, every metre matters."

Distance is simply how far an object moves from one place to another.

For example, if an F1 car drives around a 5 km track one time, the distance travelled is 5 kilometres. Easy, right?

