Formula 1: Starter Information

What is Formula 1?

Formula 1 is the **most prestigious category of four-wheeled motorsport**, being a global and international league, controlled and **managed by the International Automobile Federation** (FIA).



They are called **single-seaters** because they only have one seat, and they are built to reach **very high speeds (up to 350 km/h)**. They have a precise aerodynamic design, and every detail is designed to be as fast as possible.

Every year, a season takes place, which includes many races (22–24 races) called **Grand Prix**, held in different countries such as Spain, Monaco, Italy, Japan, or the United States.

Throughout the year, drivers and teams **earn points based on the position in which they finish each race** (starting with 10th place earning 1 point, 9th with 2 points, 8th with 4 points, 7th with 6, up to 1st place, which earns 25 points).

At the end of the season, the following titles are awarded:

- World Drivers' Champion (WDC)
- World Constructors' Champion (WCC)



Max Verstappen after winning his fourth consecutive drivers' championship in 2024.

Formula 1 Teams and Drivers

In Formula 1, different teams take part each season (there are seasons where 11 teams may participate, such as in 2026, although there are usually 10 teams in most seasons), and each team has two drivers who compete both individually and to help the team win the Constructors' Championship.



Scuderia Ferrari (Ferrari)

- Charles Leclerc (Monegasque)
- Lewis Hamilton (British)

Ferrari is the oldest and most famous team in Formula 1. Its long history is full of successes as well as dramatic moments.



Oracle Red Bull Racing (Red Bull)

- Max Verstappen (Dutch)
- **Liam Lawson** (New Zealander, replaced by Yuki Tsunoda on the Japanese Grand Prix, moving to Racing Bulls)

Red Bull Racing has established itself as the team to beat in recent years. It is the current champion team.



Mercedes-AMG Petronas F1 Team

- George Russell (British)
- Andrea Kimi Antonelli (Italian)

They were the dominant force between 2014 and 2020, the most successful team in history.



Aston Martin Aramco F1 Team

- Fernando Alonso (Spanish)
- Lance Stroll (Canadian)

Aston Martin has made a strong comeback since the disastrous years of 2020-2022, becoming very popular thanks to Fernando Alonso.



McLaren F1 Team

- Lando Norris (British)
- Oscar Piastri (Australian)

Highly competitive, especially on fast circuits, currently leading the 2025 Constructors' Championship.



BWT Alpine F1 Team (Renault)

- Pierre Gasly (French)
- Jack Doohan (Australian)

Alpine is the team based in France, born from French motorsport tradition, with strong support from brands in its home country.



Stake F1 Team Kick Sauber

- Nico Hülkenberg (German)
- Gabriel Bortoleto (Brazilian)

Kick Sauber has undergone several transformations, previously known as Alfa Romeo Racing. It is in the process of transformation.



Visa Cash App Racing Bulls F1 Team

- Yuki Tsunoda (Japanese, now at Red Bull Racing, replaced by Liam Lawson)
- Isack Hadjar (French)

RB maintains a strong relationship with Oracle Red Bull Racing, acting as the secondary team for developing drivers.



Atlassian Williams Racing

- Alex Albon (Thai)
- Carlos Sainz (Spanish)

Williams is one of the most iconic teams in F1, with a rich history of successes and innovations.



MoneyGram Haas F1 Team

- Esteban Ocon (French)
- Ollie Bearman (British)

With American origins, Haas brings a different perspective to a sport historically dominated by European teams.

How does a Formula 1 Grand Prix work?

The Formula 1 Grand Prix takes place from Friday to Sunday, with several phases and stages throughout the weekend:

Friday: Free Practice Sessions

Friday is used for teams to start testing how the car behaves on the circuit. There are two sessions:

- **FP1 (Free Practice 1):** Lasts one hour, and teams conduct rhythm tests and car setup adjustments.
- **FP2 (Free Practice 2):** Also lasts one hour. Teams perform longer runs to evaluate tire wear, usually with hard tires.

Saturday: Final Practice and Qualifying

• **FP3 (Free Practice 3):** The final practice session to fine-tune the car, usually with soft tires.

🚵 Qualifying (Qualy)

This determines the starting positions for each driver in Sunday's race. It is divided into three phases:

- Q1: All drivers set fast laps with soft tires. The 5 slowest drivers are eliminated.
- **Q2:** The remaining 15 drivers go out again, and the 5 slowest are eliminated.
- Q3: The top 10 drivers battle for the "pole position" (first place on the starting grid).

M Sunday: The Race

Drivers complete a formation lap and then line up on the starting grid.

When the lights go out, the race begins and continues until the end.

The race typically lasts between 50 and 70 laps, depending on the circuit. The first driver to cross the finish line wins, but the top 10 drivers earn points.





Types of Tires and Pit Stops in Formula 1

In a Formula 1 Grand Prix, tires are one of the most crucial elements. While the cars are incredibly powerful, proper tire management can be the difference between victory and failure.

Teams must choose which tires to use based on several factors, such as the weather, track temperature, and their race strategy:

▼ Red Tire - Soft

- Characteristics: Provides a lot of grip but wears out quickly.
- When to use: Ideal for the early stages of the race when drivers want to set fast lap times. Used on dry tracks for short bursts of fast laps.
- **Advantage:** Offers great performance in terms of speed but must be managed carefully to prevent excessive wear.

▼ — Yellow Tire – Medium

- Characteristics: A balance between durability and speed.
- When to use: A safer option for changing conditions, such as temperature or grip. Can be used for both mid-race and start of the race.

 Advantage: Good durability and a popular choice for medium-distance strategies.

▼ ○ Grey Tire – Hard

- Characteristics: Offers great durability but is slower.
- When to use: Ideal for longer races or when track conditions are hotter or more abrasive. Teams use these mainly for longer stints without stopping.
- Advantage: Allows for longer pit stops but doesn't provide the same fast lap times as the soft tires.

▼ Green Tire – Inters (Intermediate)

- Characteristics: A middle ground between wet and dry tires.
- When to use: In light rain or wet conditions, but not wet enough to require full wet tires.
- **Advantage:** Allows drivers to maintain speed without losing too much traction on a damp track, when full wet tires are unnecessary.

▼ Blue Tire – Wets (Wet)

- **Characteristics:** Designed for rainy conditions, these tires allow water to drain off the track without losing grip.
- When to use: When the track is wet, and dry tires do not provide enough traction.
- Advantage: Enables racing in heavy rain conditions, though they are slower (20-30 seconds per lap slower) and should only be used when the track is fully wet.

Pit Stops

One of the most exciting aspects of each race is watching the teams make their pit stops. These are decisive moments where every second counts.

- **Double Stint Strategy:** Drivers make two stops to change tires, maximizing the performance of each tire type.
- **Safety Car Pit Stops:** When a safety car is deployed on track, many teams take the opportunity to pit to avoid losing time.

• **Weather-related Pit Stops:** If it starts raining or the track dries, teams can change tires to adapt to the new track conditions.

Teams aim to make their pit stops as quick as possible. In Formula 1, pit stops are extremely precise, with tire changes taking 20-25 seconds. In the best cases, a team can change all four tires in under 2 seconds.

F1 Flag Signals and Incidents

- **Red Flag:** The race is stopped due to a serious incident or weather conditions. All cars must return to the pit lane. The race will be restarted after the issue is cleared.
- **Yellow Flag:** A caution signal. Drivers must slow down and cannot overtake. It indicates a danger ahead, such as an accident or debris on the track.
- **Safety Car**: A car is deployed on the track to control the speed of the race while an incident is cleared. Drivers must follow the safety car and maintain a reduced speed.
- **Blue Flag:** This tells a driver that a faster car is approaching and they must let it pass. It's used when a backmarker is blocking a faster car.
- **Black Flag**: The driver has been disqualified from the race and must leave the track immediately. This flag is shown if a driver violates rules.
- Black & White Flag: A warning for unsporting behavior or dangerous driving. If a driver continues the behavior, they may face further penalties.
- **Green Flag**: Indicates that the track is clear, and the race can proceed at full speed again after a yellow flag or safety car period.
- White Flag: Indicates a slow-moving car ahead, usually a car that's either in trouble or a lapped car that isn't necessarily off the track.
- **Checkered Flag**: The race has ended, and the first car to cross the line after this flag is the winner.
- Double Yellow Flag: A more serious hazard is present, such as a major crash or track blockage. Drivers must slow down significantly and avoid overtaking



