Name: _____ Date: _____

Noah Lyles: Races and the Rules Behind Them

Reading level 10 (6th grade) · 1076 words

How did Noah Lyles become a sprint champion? His results tell part of the story, and this book follows them from 2019 to 2025. Each race comes with a rule that shaped it, such as a curve, a start or a finish line. On August 4, 2024, in the Olympic 100-meter final in Paris, he crossed the line, and no one could tell by eye if he had won. Photo-finish judges could. They gave him the gold medal by five thousandths of a second.

The first stop is Doha, Qatar, in 2019. In the world 200-meter final there, one runner led into the home straight. Lyles, World Athletics wrote, was the first to come past him. He won in 19.83 seconds, and the silver-medal time was 19.95. That gap was 0.12 second, which is 24 times the gap he would win by in Paris, by this book's arithmetic. Nobody needed a photograph to sort out that finish. The 200 is a different race from the 100, with its own plan.

The 200 is run on half of a standard 400-meter track. A runner takes a curve at nearly full speed, then runs the straight to the line. A curve raises a fairness problem. Runners in the outside lanes travel farther than runners on the inside. So the rules stagger the start lines, and the outside lanes start ahead. Each lane is 1.22 meters wide, and everyone must stay in their own lane the whole way. Without the stagger, the inside lane would be the shortest trip.

At the Tokyo Olympics, on August 4, 2021, Lyles finished third in the 200 meters in 19.74 seconds. That was a bronze medal, and the winner ran 19.62. Silver was 19.68. Lyles was 24 and the reigning world champion. He had come in as the top contender after winning the U.S. trials in 19.74. It was the first of three Olympic medals he has won through 2024. A year later, in Eugene, Oregon, he ran faster than ever.

On July 21, 2022, Lyles won the world 200 meters in 19.31. That broke the American record of 19.32. Michael Johnson set it in the 1996 Olympic final in Atlanta. For a moment, the stadium board showed 19.32. Then the official time changed to 19.31. The next two runners, both Americans, ran 19.77 and 19.80. One hundredth of a second decided if Lyles owned the record or only matched it. At about ten meters per second, by this book's math, a hundredth is about ten centimeters.

A year later, in Budapest, Hungary, he went after both short races. On August 20, 2023, Lyles won the world 100 meters in 9.83. World Athletics listed it as the year's best time. Five days later, on August 25, he won the 200 in 19.52. That was his third world 200-meter title in a row. Winning both events at one meet is called a sprint double, and with it he had won a world title at each distance.

Before any of these races can begin, the start has to be right. In races up to 400 meters, runners use a crouch start and starting blocks. The starter says "On your marks," then "Set."

The starter sends the signal when all of them are steady. Sensors in the blocks measure reaction time, the gap between the signal and the first push. If it is less than 0.100 second, the system flags a possible false start. Under World Athletics rules, the runner responsible is disqualified.

In the Paris final, Lyles' reaction time was 0.178 second. That was among the slowest starts of the eight finalists. The official results list reaction times to the thousandth, and the eight ran from 0.108 to 0.178 second. Team USA reported that Lyles was last through the first 40 meters. Press reports said the signal came from speakers behind each runner. A slow start costs time, but the clock starts at the signal, so it is already counted in the final number.

In the last ten meters, Team USA reported, Lyles and Kishane Thompson of Jamaica were dipping toward the line, along with five other runners. The dip matters because of a rule about the finish. Runners are placed by when the torso reaches the near edge of the finish line. The rules set the torso apart from the head, neck, arms, legs, hands and feet. Time is taken at the same moment. Sports Illustrated reported that neither was sure of the result right away.

A photo-finish camera builds its image from one column of pixels at the line. It scans that column over and over. Its maker, Omega, said its new camera could take up to 40,000 pictures per second. The picture put Lyles first. Team USA and others reported the times as 9.784 and 9.789. The official results printed both as 9.79. Times are written to the next longer hundredth of a second. The order came from the image. At about ten meters per second, five thousandths of a second is roughly five centimeters, by this book's math.

World Athletics said all eight men ran under ten seconds, the first time that had happened in one wind-legal race. A 100-meter time counts as wind legal only if the wind is 2 meters per second or less. In the Paris final, the reading was +1.0. So the time counted. Team USA reported that Lyles was the first American to win the Olympic 100 meters since 2004. That is twenty years, by this book's count.

Four days later, on August 8, Lyles ran the Olympic 200 meters. He finished third in 19.70, another bronze, and his second in the 200 at an Olympic Games. Those two Paris medals, one gold and one bronze, are two of the three on Team USA's list for him. On September 19, 2025, at the world championships in Tokyo, the city of his first Olympic medal, he won the 200 in 19.52, six hundredths ahead of the next runner.

Through September 2025, Lyles had won four world 200-meter titles, in 2019, 2022, 2023 and 2025. In between came a 100-meter world title and an Olympic gold. From Doha to Tokyo, two moments gave each of those results its number. The clock began at the start signal, and it stopped when the torso reached the finish line. Everything else, the lanes, the wind gauge and the camera, was there to make those two moments the same for every runner.

Questions

1. Why did the 200-meter race need staggered start lines?

A. The track is too short to race on
B. Outer lanes run farther
C. Lanes are too narrow to pass in

2. What did the sensors in the blocks measure?

A. The speed of the wind
B. The runner's body weight
C. The gap before a push

3. What was Lyles' time when he won the 2022 world 200 meters?

A. 19.31
B. 19.52
C. 19.83

4. In the sentence "Runners are placed by when the torso reaches the near edge," what does placed mean?

A. Ranked
B. Set down
C. Held back

5. Why did a slow start of 0.178 second not add extra time to Lyles' result?

A. Judges removed it
B. The clock started at the signal
C. The wind helped him

6. What decided the order of the first two finishers in the Paris 100 meters?

A. The wind
B. The starting signal
C. The photo-finish image

Words to know

stagger: offset start lines
torso: middle of body
sensors: detecting devices
disqualified: removed from race
double: two wins

Answer key: Noah Lyles: Races and the Rules Behind Them

1. B. Outer lanes run farther
2. C. The gap before a push
3. A. 19.31
4. A. Ranked
5. B. The clock started at the signal
6. C. The photo-finish image