

Globe Lesson 18 - Charles Lindbergh's Flight to Paris - Grade 4-5

Skills used Latitude & Longitude
 Using scale to measure distance
 Critical thinking
 Solving problems
 Using directions

Vocabulary aviation

Materials Needed Globe in Horizon Ring Mounting, World Map

Lesson

If your classroom has a large wall map of the world, pull it down and locate the cities of New York in the United States and Paris, France in Europe. New York is located at $41^{\circ}\text{N}/74^{\circ}\text{W}$, and Paris is located at $49^{\circ}\text{N}/2^{\circ}\text{E}$. If you do not have a wall map, use the world map found in your social studies textbook or any other flat map of the world.

In May 1927 Charles Lindbergh made the first solo non-stop flight from New York to Paris. This was a very dangerous flight to undertake in 1927. **Aviation** was new and airplane engines were not very dependable at that time. Also, the aircraft themselves were slow and could not fly long distances without refueling. As a result, it was critical that Lindbergh fly as close to the shortest route as possible between New York and Paris to enable him to successfully complete the trip.

On a flat map of the world, draw, or try to visualize, the shortest route between New York and Paris. Would this route on the flat map take you over any major islands in the Atlantic Ocean?

(1.) _____ Yet, when Lindbergh made his trip, he flew over the island of Newfoundland in Canada. Newfoundland is located at $48^{\circ}\text{N}/57^{\circ}\text{W}$. On the flat map, this would appear to be out of his way if he wanted to fly the shortest route. Why do you think he flew a route that took him over Newfoundland? (2.)

Your globe can help explain this mystery. Use the globe's mounting ring to draw a great circle route between New York and Paris. Did the route take you over Newfoundland? (3.) _____ As you can see, a straight line on a flat map is not always the shortest distance between two locations. Do some research on great circle routes if you need additional clarification.

How long is the great circle distance between New York and Paris? (4.) _____ If it took Lindbergh approximately 33.5 hours to make his trip, what was his average speed during his journey? (5.) _____ How long would it take a modern jet airliner to fly this route? (6.) _____

What compass direction would an airplane be headed at the beginning of this flight? (7.) _____
What direction would the plane be headed near the end of the flight? (8.) _____