

Name:

Date:

Route Planning Activity

Part 1: Plan a Bus Route

- Imagine you are planning a new bus route for your city. Use the map provided to plot the route.
- Consider factors like traffic congestion, passenger demand, and travel time. Use the table to estimate travel times between each stop.

Stop Number	Location	Estimated Passengers	Traffic Level (High/Medium/Low)	Travel Time to Next Stop (Minutes)
1	Downtown			
2	Central Park			
3	Shopping Mall			
4	Residential Area			
5	School			
6	Hospital			
7	Sports Complex			

Part 2: Create a Bus Schedule:

- Based on your route, create a bus schedule that minimizes travel time and maximizes passenger convenience.
- Consider peak hours when there are more passengers and adjust the frequency of buses accordingly.

Time	Stop 1	Stop 2	Stop 3	Stop 4	Stop 5	Stop 6	Stop 7
7:00 AM							
7:15 AM							
7:30 AM							
7:45 AM							
8:00 AM							
8:15 AM							
8:30 AM							
8:45 AM							
9:00 AM							

Part 3: Evaluation and Optimization

- Check if your schedule meets the needs of passengers and reduces travel time.
- Identify any bottlenecks or areas for improvement.
- Make changes to your schedule based on your evaluation.
- Use AI tools to simulate different scenarios and find the most efficient schedule.

Part 4: Presentation and Reflection

- Create a presentation to explain your bus route and schedule.
- Include the factors you considered and how AI helped optimize the route.
- Present your findings to your classmates.
- Discuss the benefits of using AI in public transportation and how it can improve daily commutes.

Reflection:

Write a short reflection on what you learned about AI and public transportation. How can this technology benefit cities and communities?
