# **Core Skills Analysis**

### English

- Developed vocabulary associated with road infrastructure such as 'motorway' and 'dual carriageway'.
- Practiced descriptive writing skills by contrasting and comparing the features of both motorways and dual carriageways.
- Enhanced communication skills through discussing the differences and benefits of each type of road.

### Math

- Applied measurement skills to calculate the average widths of motorways and dual carriageways mentioned.
- Utilized problem-solving techniques to analyze the speed limits and traffic flow on these types of roads.
- Practiced graphing skills by representing the data of traffic volume on motorways versus dual carriageways.

### **Physical Education**

- Explored the importance of road safety rules and regulations related to motorways and dual carriageways.
- Engaged in discussions on how physical health and well-being are impacted by the accessibility of these road types.
- Understood the significance of rest areas and service stations along motorways for drivers' physical comfort during long journeys.

## Science

- Studied the environmental impact of motorways compared to dual carriageways in terms of noise pollution and habitat disruption.
- Explored the engineering principles behind the construction and maintenance of these types of roads.
- Analyzed the role of technology in enhancing safety features on motorways and dual carriageways.

## **Social Studies**

- Discussed the economic implications of investing in the construction and upkeep of motorways versus dual carriageways.
- Explored the historical development and evolution of these road types in different regions.
- Compared and contrasted the societal benefits and drawbacks of prioritizing motorway infrastructure over dual carriageways.

### Tips

To encourage further development after this activity, consider incorporating hands-on experiences such as visiting a local highway authority or taking a field trip to observe motorways and dual carriageways firsthand. Engage in debates or role-playing scenarios about urban planning decisions involving road development. Encourage students to research and present case studies on successful highway projects worldwide to broaden their understanding of the topic.

#### **Book Recommendations**

• Highway Engineering by Martin Rogers: This book provides a comprehensive overview of the

principles and practices in highway engineering, offering insights into the design, construction, and maintenance of road systems.

- <u>The Motorway Achievement: Building the Network in England</u> by Philip Boucher: Explore the history and challenges faced in constructing the motorway network in England, highlighting the impact of these transportation routes on society and development.
- <u>Roads: An Anthropology of Infrastructure and Expertise</u> by Penny Harvey and Hannah Knox: Delve into the social and cultural dimensions of roads as infrastructure, examining how they shape human interactions, mobility, and landscapes.