** Geography Assignment 5:**

**Canada’s Mixed Economy**

**Date:** Due

**Overview:**

The automobile industry is one of the leading manufacturing activities in Canada. Motor vehicles and parts are Canada’s leading export products, greater in value than wheat, lumber, or minerals. The industry is concentrated in southern Ontario, where it has a tremendous effect on the economy of the region. More than a quarter of Ontario’s manufacturing employees work in some phase of the auto industry, either producing auto parts or assembling the actual vehicles.

*Economic Resources*

Chrysler Canada was formed in 1925 and operates two plants in southern Ontario, one in Windsor, and the other in Brampton. The plant in Brampton produces the Chrysler 300 and Dodge Magnum sedans for the North American market. The assembly plant is over half a kilometer wide but does not make any parts. Instead, parts are made across the Province and assembled into completed cars. The plant is located in an area with a large supply of trained labour, land and capital resources, and transportation routes.

*Input and Process*

Chrysler has a reputation for progressive designs from their high-tech Design Institute in Detroit, Michigan. Like the fashion industry, new ideas are featured at international auto shows to test public reaction – the input stage of manufacturing. The process stage uses the assembly line. Three separate lines begin moving in different areas of the plant: the engine, chassis (or frame), and body lines. When both the engine and chassis are complete, powerful robotic arms fit the engine into the chassis. Later, other robots lower the completed body onto the chassis. Painting, upholstery, glass, tires, and trim are all added along the continuously moving final assembly line.

*Output and Feedback*

A new vehicle rolls off final assembly every few minutes. Delivery within a few hundred kilometers is completed using trucks, while more distant delivery uses covered triple-stack railway units, specially designed for the purpose.

The popularity of the retro-styled Dodge Charger led Chrysler to develop a similar concept car. In this assignment, students will design and name Chrysler’s new concept car.

**Preparation Work and Tasks:**

1. Suggest why robotics are used to **a)** combine the three assembly lines, **b)** paint car bodies, **c)** install windshields. **(5)**
2. Make a chart to compare the manufacturing systems for clothing and cars. Consider both similarities and differences. **(5)**

|  |  |  |
| --- | --- | --- |
|  | Clothing  Manufacturing System | Automobile  Manufacturing System |
| Similarities |  |  |
| Differences |  |  |

1. All of Canada’s major vehicle assembly plants are in Ontario. Explain why. Look at atlas maps to identify why certain resources or goods are produced in **a)** British Columbia, **b)** the Prairies, **c)** the North, and **d)** the Atlantic region. **(5)**
2. Design a new concept car for Chrysler. Think about the shape, size, name, and luxury of the car. **(10)**
3. Design an automobile assembly plant similar to the plant in Brampton, Ontario that will build your new concept car. Be sure to think about the location of the plant, space, administration, and the assembly line. **(25)**

**Evaluation:**

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| --- | --- | --- | --- | --- | --- |
| **Category** | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **%** |
| Research and Knowledge | The assignment demonstrates exceptional knowledge of the automobile industry and Canada’s Mixed Economy. | The assignment demonstrates adequate knowledge of the automobile industry and Canada’s Mixed Economy. |  |  | 30 |
| Information | The assignment clearly identifies and answers all task questions. The information is very accurate. | The assignment somewhat identifies and answers all task questions. The information is generally accurate. |  |  | 30 |
| Design and Presentation | The assignment’s design and layout is very attractive and inviting. | The assignment’s design and layout is fairly attractive and inviting. |  |  | 40 |