Task 1: Process Diagram

Subject: The diagram below shows how a biofuel called ethanol is produced. Summarize the information by selecting and reporting the main features, and make comparisons where relevant.

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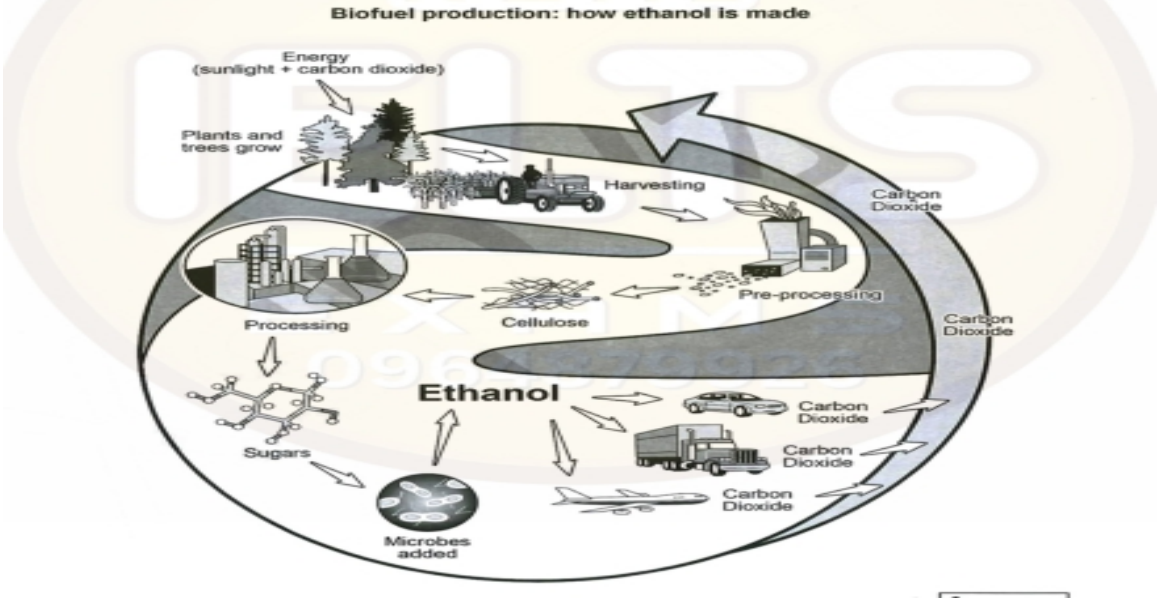
Write at least 150 words.



Model Answer #1

Response:

The diagram illustrates the various stages involved in the production of ethanol, a type of biofuel, beginning from the cultivation of plants and trees.

Overall, the ethanol production process encompasses several key steps, including growth, harvesting, processing, fermentation, and transportation, with carbon dioxide emissions occurring at various phases.

Initially, the process starts with the growth of plants and trees, which utilize sunlight and carbon dioxide for photosynthesis. Once matured, these biomass sources are harvested, and in this stage, carbon dioxide is released. Following harvesting, the plants undergo a pre-processing phase where they are converted into cellulose and sugars. This transformation lays the groundwork for the subsequent fermentation process, which is crucial for ethanol production.

In the fermentation stage, microbes are introduced to the sugars derived from the biomass. These microorganisms facilitate the conversion of sugars into ethanol through a fermentation reaction. After the production of ethanol, the final product is transported to various locations for distribution. It is noteworthy that carbon dioxide emissions occur throughout the transportation process, indicating an environmental impact associated with each stage of the ethanol production cycle.

Evaluation:

Overall Band Score: 9

Task Response (9): Excellent summary of the provided diagram. All the main features are accurately described and compared where relevant.

Coherence & Cohesion (9): The report is exceptionally well-organized and easy to follow. The flow of information is natural and logical.

Lexical Resource (8.5): A wide range of sophisticated vocabulary is used accurately and appropriately. The language is precise and effective.

Grammatical Range & Accuracy (9): The grammar is impeccable. A wide range of grammatical structures is used with complete accuracy and fluency.

Model Answer #2

Response:

The diagram illustrates the process of manufacturing ethanol, a type of biofuel.

Overall, the production of ethanol is a cyclical process that consists of harvesting plants, extracting cellulose, converting it into sugars, adding microbes to create ethanol, and carbon dioxide produced when the ethanol is burned cycling back to plants during photosynthesis.

The process begins with plants and trees using sunlight and carbon dioxide as energy sources for growth. Once harvested, they undergo a preprocessing stage, where a crushing machine breaks them down into small pieces to facilitate further processing. These small pieces are then converted into cellulose, which is chemically processed to obtain sugars. From there, microbes are added to the sugars to convert them into ethanol.

When ethanol is burned as fuel in various vehicles, such as cars, trucks, and airplanes, carbon dioxide is released into the atmosphere. However, this carbon dioxide is reabsorbed by plants during photosynthesis, and the process begins again.

Evaluation:

Overall Band Score: 9

Task Response (9): Excellent summary of the main features of the ethanol production process. All key stages are accurately described and the cyclical nature of the process is clearly highlighted.

Coherence & Cohesion (9): The report is exceptionally well-organized and easy to follow. The logical flow of information is seamless, and the paragraphs are well-structured and appropriately linked.

Lexical Resource (8.5): A wide range of sophisticated vocabulary is used accurately and appropriately. The language is precise and natural, enhancing the clarity and impact of the report.

Grammatical Range & Accuracy (9): The report demonstrates a wide range of grammatical structures with complete accuracy and fluency. The writing is grammatically impeccable.

Model Answer #3

Response:

The diagram illustrates the process of manufacturing ethanol, a type of biofuel.

Overall, the production of ethanol is a cyclical process that consists of harvesting plants, extracting cellulose, converting it into sugars, adding microbes to create ethanol, and carbon dioxide produced when the ethanol is burned cycling back to plants during photosynthesis.

The process begins with plants and trees using sunlight and carbon dioxide as energy sources for growth. Once harvested, they undergo a preprocessing stage, where a crushing machine breaks them down into small pieces to facilitate further processing. These small pieces are then converted into cellulose, which is chemically processed to obtain sugars. From there, microbes are added to the sugars to convert them into ethanol.

When ethanol is burned as fuel in various vehicles, such as cars, trucks, and airplanes, carbon dioxide is released into the atmosphere. However, this carbon dioxide is reabsorbed by plants during photosynthesis, and the process begins again.

Evaluation:

Overall Band Score: 9

Task Response (9): Excellent summary of the main features of the ethanol production process. All key stages are accurately described and the cyclical nature of the process is clearly highlighted.

Coherence & Cohesion (9): The report is exceptionally well-organized and easy to follow. The logical flow of information is seamless, and the paragraphs are well-structured and appropriately linked.

Lexical Resource (8.5): A wide range of sophisticated vocabulary is used accurately and appropriately. The language is precise and natural, enhancing the clarity and impact of the report.

Grammatical Range & Accuracy (9): The report demonstrates a wide range of grammatical structures with complete accuracy and fluency. The writing is grammatically impeccable.

Model Answer #4

Response:

The diagram illustrates the step-by-step process involved in the production of the biofuel ethanol, starting from the cultivation of plants and trees to the final utilization of the fuel.

This production cycle encompasses several stages, including harvesting, processing, fermentation, and transportation, each contributing to the overall conversion of biomass into ethanol while emitting carbon dioxide.

Initially, the process begins with the growth of plants and trees, which harness solar energy and carbon dioxide through photosynthesis, consequently releasing oxygen. Subsequently, these biomass sources are harvested by agricultural workers and foresters using machinery. The harvested materials undergo pre-processing to extract cellulose and subsequent conversion into simpler sugars. This transformation is integral as it serves as the precursor for the fermentation process that follows.

In the next phase, the extracted sugars are subjected to microbial fermentation, whereby the introduction of microbes facilitates the conversion of sugars into ethanol. Once produced, the ethanol is transported for usage in various combustion engines, such as those found in automobiles, trucks, and airplanes. It is noteworthy that during both the processing and transportation stages, carbon dioxide is emitted, effectively completing a cyclical process where the resultant emissions correlate with the initial absorption by the biomass, thereby promoting a sustainable environmental cycle.

Evaluation:

Overall Band Score: 9

Task Response (9): Excellent overview of the whole process. All stages are mentioned and well-explained

Coherence & Cohesion (9): The report is exceptionally well-structured and easy to follow. The flow of information is natural and logical.

Lexical Resource (9): A wide range of sophisticated vocabulary is used accurately and appropriately. The language is precise and effective.

Grammatical Range & Accuracy (9): The grammar is impeccable. A wide range of complex grammatical structures is used with complete accuracy and fluency.

Model Answer #5

Response:

The process illustrates the cycle of producing ethanol, a type of biofuel.

In general, ethanol production consists of three primary stages: harvesting and pre-processing plant materials, chemically converting them into ethanol, and using the fuel for transportation, with the cycle then recommencing.

At the start of the process, plants and trees grow as they absorb energy from sunlight and carbon dioxide. Once fully grown, they are harvested before being put into a pre-processing machine, which breaks them down into smaller components to extract cellulose.

The second stage begins with the cellulose being transported to a laboratory, where it is processed into sugars. Microbes are subsequently added to these sugars, resulting in the creation of ethanol.

Finally, ethanol is used for various modes of transportation, including cars, trucks, and airplanes. During the use of ethanol as fuel, carbon dioxide is released back into the atmosphere, which is reabsorbed by plants and trees, continuing the cycle.

Evaluation:

Overall Band Score: 9

Task Response (9): Excellent summary of the main features of the ethanol production process. All key stages are accurately described and the cyclical nature of the process is clearly highlighted.

Coherence & Cohesion (9): The report is exceptionally well-organized and easy to follow. The logical flow of information is seamless, and the use of cohesive devices is highly effective.

Lexical Resource (9): A wide range of sophisticated vocabulary is used accurately and appropriately. The language is precise and natural.

Grammatical Range & Accuracy (9): The grammar is impeccable. A wide range of grammatical structures is used with complete accuracy and fluency.