

CHEMISTRY SAMPLE ITEMS

Item 1

You are appointed as part of the engineering department in a certain company which is constructing a house in some area. At some points during the construction process, the other the workers on the site do not know which stones are appropriate to use for specific areas. The areas stated are; foundation, fire place, trench that takes dirty water and when decorating.

Support:



Task: As a student who understood the use of rocks, help the site workers to know which stones to use at given areas and help them know why you have chosen such stones to be used at those areas.

Item 2

Clean water is important to a person's health and lifestyle, and it is engineers who ensure that our water is safe to drink and use. Environmental and civil engineers help maintain the quality of our water resources.

Task:

Write a short newspaper article, explaining in what water quality is, giving some personal examples from your own experiences of good and bad water quality are and what might be a cause of "bad" water quality.

Item 3

In Uganda and other neighbouring countries, there has been an increasing challenge of air pollution as a result of some of the carbon-based compounds and products. You are part of a team working on a project to reduce carbon emissions in a city. Workers need assistance in selecting carbon-friendly options for transportation, energy production, waste management, and construction.

Task:

Assist workers in choosing carbon-friendly options and in each case give reasons.

Item 4

Uganda has always been a country that uses energy in form of hydro-electric power, of recent it has been observed that this power is not reliable since it is sometimes not stable. You are part of a team exploring nuclear processes for various purposes in a community. Workers need help understanding and using nuclear technologies for electricity, medicine, science, and big processing industry.

Task:

Help workers to understand the best alternative to hydro-electric power that is reliable. Give reasons?

END