**Everyday Chemical Reactions!**  
*A choice research assignment on chemical reactions that occur on a daily basis in our modern world.*

**The Situation**  
Whether you realize it or not, there are chemical reactions happening all around you everyday. Without chemistry, your world would look considerably different. Not only would you be wearing plain coloured, prehistoric clothes, but your hair would also be basic in the colour and style. Food would be bland and uncooked, plus forget about eating any tasty baking! Those devices in your hands would not be possible to have either! This is an opportunity for you to look into a topic that interests you, and discover what chemical reactions are being used to create or make something.

**Your Task**

Create a research project that enables you to display everything you know on your topic. This is considered a choice assignment because I am giving you the opportunity to choose what you do for the project. As long as the requirements below are included in your project, I am happy!

**Project types (*These are examples; if you have other ideas, run them by Ms. Kalyta first!*)**\*PowerPoint \*Song/Rap \*Mini-Essay \*Cartoon \*Poem \*Picture/Art Piece \*Story \*Powtoon

**Topics (*these are also examples. If you have other ideas, run them by Ms. Kalyta first!*)**\*photography \*rusting \*photosynthesis \*batteries \*baking \*combustion \*dying hair \*perming hair \*forensics \*compost \*water/waste treatment \*metabolism of food \*quick ice packs \*cellular respiration

**Requirements**

The following must be included in your project, in whatever style you choose!

* Completed project plan (handed in at end of class)
* The topic that you chose
* An explanation on how your topic relates to everyday life
* List and describe the chemicals that are involved
* Describe the signs that this chemical reaction has occurred
* How our world would look like without this common chemical reaction
* Sources: at least 3 different credible websites need to be included.

**How you will be marked…**

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| --- | --- | --- | --- | --- | --- |
| **Category** | **Does not meet standard** | **Level 1 (50-59)** | **Level 2 (60-69)** | **Level 3**  **(70-79)** | **Level 4**  **(80-100)** |
| **Knowledge and Understanding**  -Content on topic *(4)*  -Content about chemical reactions*(4)*        ***\_\_\_\_/8*** | Project shows no understanding of their chosen topic.    Project shows no understanding of chemical reactions | Project shows some understanding of their chosen topic.    Project shows some understanding of chemical reactions | Project shows basic understanding of their chosen topic.    Project shows basic understanding of chemical reactions | Project shows an understanding of their chosen topic.    Project shows an understanding of chemical reactions | Project shows an excellent understanding of their chosen topic.    Project shows an excellent understanding of chemical reactions |
| **Thinking**  -Project plan with their thinking*(2)*  -Final project as compared to their project plan*(4)*          ***\_\_\_\_/6*** | Project plan incomplete, or shows lack of effort.    Final project is incomplete, and shows no development from the project plan. | Project plan was partially completed.    Final project does not follow project plan, and shows no development from the project plan. | Project plan was completed.    Final project somewhat follows project plan, and shows some development from the project plan. | Project plan was completed.    Final project follows project plan, and shows development from the project plan. | Project plan was completed with extreme details. .    Final project follows project plan, and even shows a higher development from the project plan. |
| **Application**  -Sources are included*(2)*  -Sources are from credible sites  (not wikipedia!)*(2)*    ***\_\_\_\_/4*** | No sources are included. | Less than 3 sources are included.    The sites used for the sources are not credible. | Less than 3 sources are included.    The sites used for the sources are credible. | 3 sources are included.    The credibility of the sites used are questionable. | 3 sources are included.    The sites used for the sources are credible. |
| **Communication**  -Inclusion of requirements *(4)*  -Clarity of explanation*(4)*          ***\_\_\_\_/8*** | Less than 2 of the requirements are included in their project.      Explanations are unclear and out of context. | Less than 3 of the requirements are included in their project.      Explanations are unclear, but could benefit from further explanation. | Less than 5 of the requirements are included in their project.    Explanations are somewhat clear, but could benefit from further explanation. | Less than 7 of the requirements are included in their project.    Explanations are clear, but could benefit from further explanation. | All 7 requirements are included in their project.    Explanations of each requirement are well done and extremely clear. |
| **Total \_\_\_\_/26** | Comments: | | | | |

**Project Plan**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**My topic is:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**The type of project I will do is:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**This is how I will include every requirement in my project: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**These are the steps I will take to complete my project in time:**

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