**Absence work**

**15 April 2020**

**Mini Quiz 2**

**Answer the following questions in complete sentences. Write your responses in your books.**

**Do Now:**

1. State test and describe result for oxygen gas. (2)
2. State test and describe result for hydrogen gas (2)
3. Two chemical are combined in a conical flask, the temperature increases. What type of reaction has occurred?
4. Define independent variable. (1)
5. Calculate the temperature change and decide if the following reaction is exothermic or endothermic. Initial temperature of surroundings: 25oC, final temp: 42oC (1)

**Challenge: Explain why group 7 reactivity decreases down the group (3)**

**Atomic Structure**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Symbol** | **Group** | **Number of electrons in outer shell** |
| **Helium** |  |  |  |
| **Sodium** |  |  |  |
| **Fluorine** |  |  |  |
| **Caesium** |  |  |  |
| **Argon** |  |  |  |

**Group 1**

1. How many electrons do the alkali metals have in the outer shell? (1)
2. What happens to the number of electron shells as you go down the group? (1)
3. State 3 properties of alkali metals. (3)
4. What is produced when an Alkali metals react with oxygen? (1)

**Group 7**

1. Which halogen is a green gas? (1)
2. Which halogen is a solid at room temperature? (1)
3. Which halogen is an orange/brown liquid? (1)
4. Describe the trend in the melting and boiling points as you go down the group. (1)
5. Describe the difference in appearance between chlorine and fluorine gas. (1)

**Reactions and Gas test**

1. Define exothermic reaction. (2)
2. Define endothermic reaction (2)
3. Give two uses of exothermic reactions. (2)
4. Describe what you would see in a positive result of each gas test. (3)