**LESSON DEVELOPMENT ONE**

**PROPERTIES OF ACIDS**

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| **STAGE/TIME** | **TEACHER’S ACTIVITIES** | **LEARNER'S ACTIVITIES – MIND/HANDS ON** | **LEARNING POINTS** |
| **Step 1****Introduction** **(5 minutes)** | Asks pupils the following questions – 1. Have you ever heard the word acid? 2. How did you hear about it?  | Pupil’s respond –1. Yes/no2. They share theirs opinions on how they hear about acid | Linking the Previous knowledge to the new lesson  |
| **Step 2** **Development** **(5 minutes)** **Grouping** | 1. Groups the pupils into four groups – A, B, C, and D. 2. Guide the pupils to choose a leader and secretary for your group. 3. Gives each group learning materials. – ripe and unripe fruits – orange, pawpaw, mango, pineapple, etc. Blue litmus paper, writing material.  | 1. Belong to a group. 2. Choose their leader and secretary. 3. Received learning materials for their group.  | Pupil’s group, leader and secretary confirmed. |
| **Step 3****Development** **(10 minutes)** | Guides the groups through the following activities – 1. Cut a piece of each of the ripe and unripe fruits, taste each in turn. 2. Record your observations as sweet or sour. 3. Make a general statement about the tastes of the unripe and the ripe fruits.***Note/Warming*** – lets the pupils know that acids taste sour. Do not to taste strong acids.  | Pupil’s Activities –

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| --- | --- | --- |
| Fruit  | Ripe | Unripe  |
| Orange  | Sweet  | Sour |
| Pawpaw  | Sweet  | Sour |
| Mango  | Sweet  | Sour |
| Pineapple  | Sweet  | Sour |

General statement – all the ripe fruits had sweet taste while unripe fruits had sour taste.  | Tasting acids in common fruits  |
| **Step 4****Development** **(10 minutes)**  | Guides the groups through the following activities –1. Cut a piece of each of the other ripe and unripe fruits. Press the blue litmus paper on the cut surface. 2. Record your observations as sweet or sour. 3. Make a general statement about the tastes of the unripe and the ripe fruits.Lets the pupils that acids taste sour and turn blue litmus paper to red.  | Pupil’s Activities –

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| --- | --- |
| Fruit  | Blue Litmus paper |
| Ripe  | Unripe  |
| Orange  | Blue  | Red |
| Pawpaw  | Blue  | Red |
| Mango  | Blue  | Red |
| Pineapple  | Blue  | Red |

General statement – all the unripe fruits turn blue litmus paper red.The understand that acids taste sour and turn blue litmus paper to red.  | Testing acids in common fruits.   |
| **Step 5****Conclusion** **(10 minutes)** | To conclude the lesson, the teacher revises the entire lesson and ask the key questions. 1. What is acid? 2. What are the properties of acids?  | Pupil’s answer –1. Acids are chemical substances in almost liquid, commonly in unripe fruit.2. Properties of acids1. Acids taste sour.
2. Acids turns litmus paper to red.
 | Evaluation and Conclusion  |