**LESSON PLAN**

**School Name: Teacher’s Name:**

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| **Term** | **Date** | **Subject** | **Class** | **Unit No** | **Lesson No** | **Duration** | **Class size** |
|  |  | CHEMISTRY | S1 | 11 | 2 | 40 min | 45 |
| Type of Special Education Needs and number of learners: | 45 Learners, special attention for learners with low language skills and 4girls with low level of understanding. |
| Topic area |  |
| Sub-topic area |  |
| Unit title | Acids, Bases and PH |
| Key Unit Competence | By the end of this unit, the learners should be able to extracts indicators from flowers and use them to test observable properties of acids and bases in common domestic substances. |
| Title of the lesson | Definition of acids, bases/alkaline and their physical properties. |
| Learning Objectives | a) Knowledge and understanding. Define ACIDS and BASES.Outline some common examples of domestic substances that are either acids or basesb) Skills Classify common domestic substances as acids or bases Perform an experiment to extract indicators from flowers Use indicators in identifying and classifying acids and basesc)Attitudes and values  Develop a teamwork approach during group activities and experiments  Appreciate the importance of the procedures during experiments   |
| Plan for the class(location: in/outside) | Inside and outside |
| Learning materials | Glass of water, lemon, apple juice and litmus paper |
| References | Chemistry for Rwandan schools S1  <https://www.brightstorm.com> |

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| **Timing for each step** |  **Description of teaching and learning activities****Having the different examples of common acid and basic domestic substances, the learners by themselves classify them into groups and appreciate their existence on the earth and their importance to human life.** | **Core ideas, competences and cross cutting concepts** |
| **Teacher activities** | **Learner activities** |
| **Introduction****5 min** | **Engage phase**Showing them lemon, litmus paper, glass of water and apple and ask them to differentiate those materials.   | Learners answer questions from teacherDistinguish lemon and apple | Critical thinkingGender educationTo see somethingbrainstorming |
| **Development of the lesson****15 min** | Explore phaseSet the student into groupsFacilitate them to use lemon, glass of water, apple ‘litmus paper from sprites and sensing their materials to change the colour,Facilitate them to use motion and control blocks( if condition ) | In their groups learners will use sprites to find materials to be used like lemon, apple, glass of water, litmus paperUsing sensing to change the colour litmus paper due to acids from lemon  | Creativity and innovationCommunication skillsCooperationGender EducationCritical thinking Long life learning. |
| **10 min** | **Explain phase**Guide learners to explain their findings in front of others. Show them materials which contain acids, basis and neutral

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| acids | bases | Neutral  |
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 | Explain their findingsAsking questions and give answersThe learners in their group, carry out the simple experiment in their group and note their observations. | Listening skillsCritical thinkingGender educationLong life learningCommunication skills. |
| **5 min** | Elaborate phase: Ask learners to use scratch to see how the colour can be changed due to acids effectsAsk learners to note what they have observedUsing computers, ask learners to present their findings | The learners with their machines connected to the network, start playing their findings by using scratch blocks and sprites | Long life learningGender educationCritical thinkingCreativity and innovation |
| **Conclusion****5 min** | **Evaluate phase**In their groups ask learners to perform the activityShow how the colour can be changed through the acids and bases in reality. Playing the activity by using the scratch blocks and sprites. | The learners participate actively in the given activities. | Long life learningGender educationCritical thinkingLong life learningProblem solving skills. |