

# EaD Comprehensive Lesson Plans



or



**0248043888**

## BASIC 8

### WEEKLY LESSON PLAN – WEEK 2

|                               |                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                       |                                                                                                                                                  |  |
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| Strand:                       | Diversity of Matter                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sub-Strand:        |                                                       | Materials                                                                                                                                        |  |
| Content Standard:             | B8.1.1.1. Demonstrate knowledge of types of mixtures, and understanding of the processes of scientific investigation of separating the components of mixtures. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                       |                                                                                                                                                  |  |
| Indicator (s)                 | B8.1.1.1.1 Identify types of mixtures by name and characteristics                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    | Performance Indicator: Learners can separate mixtures |                                                                                                                                                  |  |
| Week Ending                   | 20-01-2023                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                       |                                                                                                                                                  |  |
| Class                         | B.S.8                                                                                                                                                          | Class Size:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    | Duration:                                             |                                                                                                                                                  |  |
| Subject                       | Science                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                       |                                                                                                                                                  |  |
| Reference                     | Science Curriculum, Teachers Resource Pack, Learners Resource Pack, Textbook.                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                       |                                                                                                                                                  |  |
| Teaching / Learning Resources | Bottle tops, salt, sugar, sand, gari, gravel, oil, water, Poster, Pictures.                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Core Competencies: |                                                       |                                                                                                                                                  |  |
| DAYS                          | PHASE 1 : STARTER                                                                                                                                              | PHASE 2: MAIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                                       | PHASE 3: REFLECTION                                                                                                                              |  |
| MONDAY                        | Discuss keywords and terminologies in the lesson with the Learners.                                                                                            | <div>1. Assist Learners to differentiate between Solid and Liquid.</div> <div>2. Learners in small groups to discuss and group materials into Solid and Liquid.</div> <div>3. Each group to report to the class their discussions.</div> <div>Difference Between Liquid and Solid</div> <div><ul style="list-style-type: none"><li>• Solids have definite shape and volume whereas liquids, though having a definite volume retain the shape of the container in which they are placed</li><li>• This happens because molecules in solids are rigidly packed in a regular pattern and they cannot move freely. On the other hand, there is lesser intermolecular attraction between molecules of a liquid and they move from one place to another being loosely packed.</li><li>• Liquids flow while solids don't</li></ul></div> |                    |                                                       | <div>Reflect on the differences between Solid and Liquid.</div> <div>Exercise;</div> <div>Tabulate 5 differences between Solid and Liquid.</div> |  |

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|-----------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                                                                              | <ul style="list-style-type: none"> <li>Liquids are slightly compressible while solids do not compress</li> <li>Liquids have the property of wetting that solids do not possess.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                               |
| <b>THURSDAY</b> | Learners brainstorm to explain the meaning of resultant nature of solutions. | <ol style="list-style-type: none"> <li>Demonstrate an experiment by putting together salt and sand.</li> <li>Assist Learners to describe the resultant nature of the product formed.</li> <li>Discuss with Learners the resultant nature for putting together bottle tops and oil, gravel and sand, sugar and water.</li> <li>Learners brainstorm to describe the product formed.</li> </ol> <p><b>Separating the Mixture of Sand and water;</b></p> <p>Sand and water can be separated by any of the following two methods:</p> <p>(a) Sedimentation and decantation: Mixture is kept undisturbed for some time. After some time, sand being heavier and insoluble in water, settles down at the bottom of container. Now, water is poured into another container to separate it from sand.</p> <p>(b) Filtration: Mixture of sand and water is passed through a filter paper (a filter with very fine pores). Sand particles being larger in size are retained by the filter paper and get separated from water.</p> <div data-bbox="598 1308 1219 1765"> <p style="text-align: center;"><b>MIXTURES</b></p> </div> | <p>Through questions and answers, conclude the topic.</p> <p><b>Exercise;</b></p> <p>Describe ways of separating the following mixtures:</p> <ol style="list-style-type: none"> <li>Sand and water</li> <li>Salt and water</li> <li>Gari and water</li> </ol> |

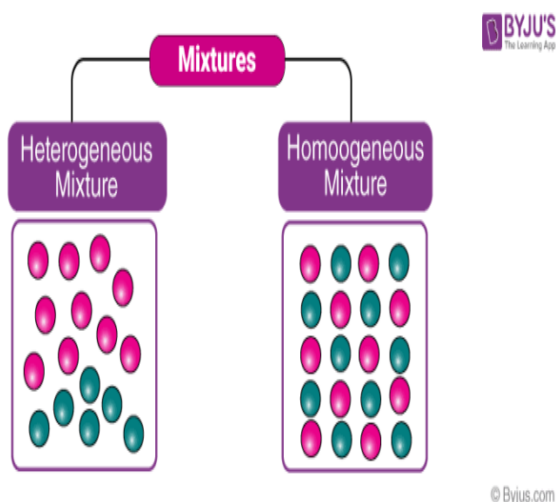
**FRIDAY**

Review Learners knowledge on the previous lesson.

1. Discuss with Learners on the homogenous and heterogeneous characteristics from mixtures of two or more materials such as sand and gravels, sand and water, oil and water.
2. Assist Learners to identify the physical characteristics of solutes and solvents.
3. Learners brainstorm to identify examples of Solutes and Solvents.

### What are Mixtures?

Mixtures are formed when two or more substances (elements or compounds) mix together without participating in a chemical change. The substances need not necessarily mix in a definite ratio to form a mixture.



### Difference between Homogeneous and Heterogeneous Mixture

| <i>Homogeneous mixture</i>                     | <i>Heterogeneous mixture</i>                        |
|------------------------------------------------|-----------------------------------------------------|
| It has a uniform composition                   | It has a non-uniform composition                    |
| It has only one phase                          | There are two or more phases                        |
| It can't be separated out physically           | It can be separated physically                      |
| 'homo' means the same                          | 'hetero' means different                            |
| <b>Example:</b> a mixture of alcohol and water | <b>Example:</b> a mixture of iron chloride and sand |

**Practical Work;**

Follow step by step procedures to separate the following mixtures;

- i. sand and water
- ii. oil and water
- iii. sand and gravel

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**Name of Teacher:**

**School:**

**District:**