

**BA SANGAM COLLEGE**

**Year 9**

**Basic Science**

**Worksheet 4**





Sub strand: Structure & Life Processes

1. Define **Asexual** reproduction

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2. Read and analyze the pictures and complete the table.

Asexual Reproduction

| <b>Plant</b>  | <b>Natural vegetative propagation method</b> |
|---|--|
| 1.<br>Ginger plant<br> |  |
| 2. Potato<br>          |  |
| 3. Dalo<br>          |  |
| 4.<br>onion<br>      |  |

3. Asexual reproduction is also called \_\_\_\_\_.

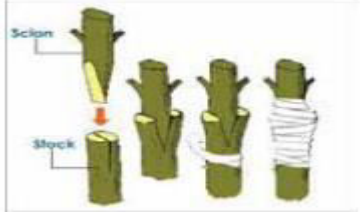
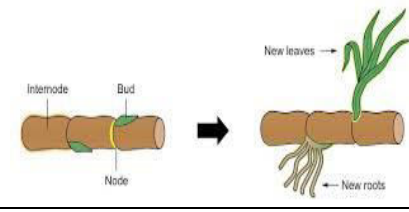
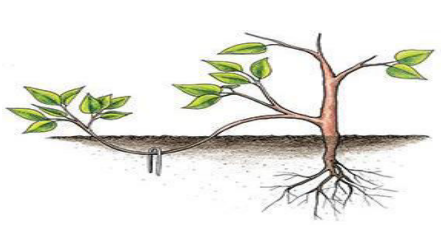
4. State **one advantage** of asexual reproduction.

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5. State the **3** methods of **artificial** vegetative reproduction.

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6. Identify the following artificial plant propagation methods from the following pictures.

| Artificial propagation method | Diagram  |
|-------------------------------|--|
|                               |  <p>The diagram illustrates the grafting process. It shows a 'Scion' (a short piece of a plant stem) being inserted into a 'Stock' (a larger plant stem). The process is shown in four stages: 1. Preparing the scion and stock with diagonal cuts. 2. Inserting the scion into the stock. 3. Wrapping the joint with a band. 4. The final grafted plant with the scion and stock joined together.</p> |
|                               |  <p>The diagram illustrates the layering process. It shows a stem with a 'Node' and 'Internode'. A 'Bud' is shown on the stem. The stem is bent and placed in the soil. An arrow points to the resulting plant with 'New leaves' and 'New roots' growing from the buried part of the stem.</p>   |
|                               |  <p>The diagram illustrates the stem cutting process. It shows a cutting being inserted into the soil. An arrow points to the resulting plant with roots and leaves growing from the cutting.</p>  |

7. The \_\_\_\_\_ is the reproductive part of a plant.

8. The **two processes** that are involved in **reproduction** in plants are:

i. \_\_\_\_\_

ii. \_\_\_\_\_

9. Some plants have flowers that are pollinated by insects while others have flowers that are pollinated by wind.

Complete the table below by stating **two** features each of the flowers pollinated by wind and insects.

| Insect pollinated flowers | Wind pollinated flowers |
|---------------------------|-------------------------|
|                           |                         |
|                           |                         |

10. a. What is **fertilization**?

\_\_\_\_\_

b. Discuss how fertilization takes place in plants.

\_\_\_\_\_

\_\_\_\_\_