DIVISIONAL PUBLIC SCHOOL Sahiwal
Cambridge Campus
Demonstration Topics of Science/Physics/Chem/Bio

Guidelines for Demonstration Lesson

Each candidate will be given 10 minutes for the demonstration.
Candidates may choose any topic of their own choice related to their subject.
Candidate should submit the lesson plan/activity planner based on the assigned topic before the demonstration.
Candidate should clearly share the learning objectives at the beginning of the lesson.
Candidate should demonstrate clear delivery of the concept.
Candidate should include a relevant activity/demonstration related to the topic.
Candidate should design and ask effective oral and verbal questions during the lesson.
Candidate should include a short assessment/Worksheet to check students' understanding.
Each criteria carries marks: sharing of lesson objectives, delivery of concept, design of oral and verbal questions, quality of assessment, and subject-based vocabulary

Classes	Topics	Learning Objectives
1	Our five senses.	Student will be able to name five senses and match each to it's body part (eyes to see ,ears to hear)
2	Plants needs to grow.	Students will be able to list what plants need to grow (water, light ,air ,soil) and explain one thing that happens if a need is missing.
3	Parts of flower	Student will be able to label carpel,stamen ,sepals and petals and state one job of each.
4	Types of ecosystem.	students will be able to define what an ecosystem is and identify the main types (forest,polar rivers, grassland and deserts).
5	Physical and Chemical Change in States of Matter	Identify ways of accelerating the process of dissolving materials in a given amount of water and provide reasoning (i.e., increasing the temperature, stirring, and breaking the solid into smaller pieces increases the process of dissolving). Identify observable changes in materials that make new materials with different properties (e.g., decaying, burning, rusting)
6	Sound and Energy	Know that energy tends to dissipate and in doing so it becomes less useful. Explain echoes in terms of the reflection of sound wave
7	Chemical Reactions	Describe that some processes and reactions are endothermic or exothermic, and this can be identified by temperature change Describe the reactivity of metals (limited to sodium, potassium, calcium, magnesium, zinc, iron, copper, gold, and silver) with oxygen, water, and dilute acids.

8	**The Periodic table**	**Describe the relationship between group number and the charge of the ions formed from elements in that group** **Described observable trends across periods, such as increasing atomic number and changing metallic character.**
9 Chem	**Polymers**	**Deduce the structure or repeat unit of a condensation polymer from given monomers and vice versa, limited to:** **(a) polyamides from a dicarboxylic acid and a diamine** **(b) polyesters from a dicarboxylic acid and a diol**
9 BIO	**Circulatory system.**	**Student will be able to understand the need for a transport system. and elaborate double circulation. Describe the components of blood and coronary heart diseases.**
9 Phy	**Newton's Laws of Motion**	**Students will be able to analyze real-life situations and determine which of Newton's three laws of motion is being applied.** **Students will be able to differentiate between inertia, force, and acceleration by interpreting practical examples and scenarios.**