DIWALI VACATION – WORKSHEET

Science – Grade 6

Select any TWO of the following				
Sl. No.	**Topic**	**Basic**	**Intermediate**	**Advanced**
1	Getting into plants	Collect leaves from different plants around your home or school. Observe and draw them, noting the shape, color, and size. Identify whether they are simple or compound leaves.	Set up a simple experiment to observe capillary action in plants. Place a white flower or celery stalk in colored water and observe how the color travels up the stem. Document the changes and explain the process.	Conduct a mini research project on how different plants adapt to their environments (e.g., desert, aquatic, tropical). Create a presentation or model showing these adaptations, such as thick leaves for water storage or floating leaves for aquatic plants.
2	Changes around Us	List 10 changes you observe at home (e.g., ice melting, dough rising). Classify them as physical or chemical changes, and explain why you categorized them that way.	Perform a simple activity to show a reversible change: melt some wax or chocolate, then cool it to solidify again. Document the process with pictures or drawings.	Conduct an experiment to observe how different materials react to heat. Use materials like paper, metal, and plastic. Record whether the change is reversible or irreversible and explain why.
3	Elements, Compounds, and Mixtures	Collect examples of common elements, compounds, and mixtures from around your home (e.g., iron nail, water, saltwater). Create a table to categorize them and explain the differences between each.	Make a mixture of sand and salt. Use methods like sieving, filtration, and evaporation to separate them. Write down the steps you followed and explain the principles behind each method.	Conduct an experiment to create a compound through a simple chemical reaction, such as baking soda and vinegar to produce carbon dioxide. Document the process, observations, and changes that occurred during the reaction.
4	Our food resources	Prepare a food chart for one day and list the different nutrients present in each meal. Draw or paste pictures of the food items and label them with their nutrient content.	Visit a local market or farm and find out how different food items are stored to keep them fresh. Make a list of preservation methods used (e.g., refrigeration, drying, canning).	Conduct a small survey among your family or friends to find out about their eating habits. Compare the variety of foods they eat and discuss if their diet meets the requirements of a balanced diet. Suggest changes for improvement.

5	Matter and materials	Demonstrate the three states of matter using common items: ice (solid), water (liquid), and steam (gas). Observe how heating or cooling changes the state. Record your observations with drawings or photos.	Conduct an experiment to observe the effect of temperature on the solubility of sugar in water. Measure how much sugar dissolves in cold water versus hot water. Present your findings in a chart or graph.	Investigate sublimation using camphor or dry ice (with adult supervision). Observe and document how the substance changes directly from solid to gas. Explain the conditions under which sublimation occurs and its applications in daily life.

These activities are hands-on, engaging, and promote critical thinking, allowing students to explore science concepts actively during the Diwali vacation.

Please choose two topics from the table above based on our science topics. You can select either Basic, Intermediate, or Advanced level for each topic.