QADIMS LUMIÈRE
Montessori to Matric O & A Level
School & College

Class 6 & 7 mathematics

Summer vacations homework

1.Students will research the various elements of basic geometry, as well as town/city maps.

2. Students will work to create their own town map, including specific requirements given.

3. Students will independently identify specific geometric elements, using their map as a reference.

Objective: To design a town using different shapes and geometric concepts.

Materials Needed:

1. Paper
2. Pencils, pens, and colored markers
3. Ruler

Instructions:

1.Introduction:

Explain that in this project, you will create a town using shapes and geometry. Discuss how different shapes can be used to represent buildings, roads, and landmarks.

2.Town Map Layout:

Draw an outline of your town on a piece of paper. Divide the space into different areas, such as residential, commercial, and recreational zones.

Residential Area:

Determine the dimensions for the residential area. Measure and mark the length and width of the residential zone on your town map. Ensure that the size of the area can accommodate a suitable number of houses.

Market Place:

Decide on the dimensions for the market place. Measure and mark the length and width of the market place on your town map. Consider the number of shops or stalls that can fit comfortably within the designated area.

Distance Between Zones:

Plan the distances between different zones. Measure and mark the distances between the residential area and the market place, as well as between other zones like schools, parks, or community centers. Consider the convenience and accessibility of the distances.

For example, you might decide that your market place should be 60 meters long and 40 meters wide. On your town map or drawing, use a ruler or measuring tape to measure and

mark 60 centimeters for the length and 40 centimeters for the width, ensuring that the scale of your map accurately represents the desired real-life dimensions.

3.Geometric Buildings:

Use shapes to represent buildings in your town. For example, you can draw rectangles for houses, circles for parks, and squares for shops. Be creative and think about the size and placement of the buildings.

4. Road Network:

Draw roads to connect different parts of your town. Use straight lines to create intersections and include features like roundabouts or traffic lights. Consider the flow of traffic and accessibility.

5. Landmarks and Points of Interest:

Identify and draw landmarks or points of interest in your town. These can be special places like a fountain, a statue, a clock tower, or a community center. Think about where they should be located.

6. Presentation:

Present your town design to the class. Explain the choices you made and describe the different shapes and features in your town. Discuss how you considered the overall layout and functionality of your town.

7. Reflection:

Reflect on the project and will write an essay of 150 words at the back of your class work cooy as what you have learned about geometry and designing a town. Talk about how shapes can be used to create a functional and visually appealing environment.

By creating a geometrical town, you will explore shapes and their applications in urban design. This project will help you develop your creativity, spatial awareness, and understanding of basic geometric concepts.