

5th Grade Maths Lesson Plan — Chapter 7: Shapes and Patterns

School Name: _____ Teacher: _____

From Date: _____ To Date: _____

Learning Outcomes :

- Construct intricate interwoven geometric patterns using strict sequential rules.
- Differentiate regular polygons from irregular forms and verify tessellation properties.
- Classify triangles by their side ratios into equilateral, isosceles, and scalene forms.

Stage	Learning Goals	What the Teacher Does	What the Students Do	Tools & Materials	Sign
Engage (Get Interested)	Awaken artistic geometric recognition through weaving actions.	Introduce paper mat weaving. Show a grid blueprint and ask: 'How do simple alternating paths create clean checkerboard designs?'	Observe interwoven templates, identifying how alternating over-under steps form regular grids.	Sample woven mats, geometric pattern posters.	
Explore (Look & Find)	Build sequential coordinate patterns on dot and grid grids.	Provide grid paper and start a pattern line. Instruct students to continue the geometric pattern symmetrically.	Analyze the starter lines on grid paper, trace paths, and fill out remaining blocks to complete the full design.	Grid paper sheets, colored fine-tip markers.	
Explain (Learn & Understand)	Classify triangles based on side congruence and internal angles.	Define categories using cutout shapes: Equilateral (all sides equal), Isosceles (two sides equal), and Scalene (no sides equal).	Measure side ratios and fold cutouts down the center to check line symmetry and verify if opposite base angles match.	Triangle cutout kits, geometry rulers, protractors.	
Elaborate (Think Deeper)	Connect individual points to generate complex spatial designs.	Provide string templates with labeled boundary points. Guide students to connect points sequentially (e.g., 1 to 11, 11 to 2).	Loop distinct colored threads around designated point markers systematically to build intersecting polygon webs.	Thick chart board circles with 24 numbered pins, colored threads.	
Evaluate (Check Progress)	Check ability to link descriptive properties to their matching shapes.	Distribute a shape property matrix (e.g., 'I have 3 equal sides and 3 equal angles. What triangle am I?').	Match riddle cards to their correct classifications (e.g., Equilateral Triangle) and sketch them on grid space.	Shape logic assessment matrix worksheet.	