TEKS Cluster: Geometry and Measurement
TEKS Subcluster: Area
Student Expectations: 7.9(C), 7.9(D)
Activities Summary: Students apply their knowledge of area to composite figures that include rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles. They also learn to measure prisms and pyramids with rectangular and triangular bases by finding their lateral and total surface area. Activities may be organized and delivered in two topics: **Composite Area**, and **Lateral and Total Surface Area**.

Activity Title Student Expectations	**Activity Topic**	**Type**			**Delivery**		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Composite Area							
Different Shapes, Different Formulas 7.9(C)	**Use Formulas to Find Area** Students draw diagrams, write formulas, fill in the formulas, and calculate area.	✓	✓		✓		
Composite Figures 7.9(C)	**Area of Composite Figures** Students create figures that have a given composite area.			✓		✓	
Measuring All the Parts 7.9(C)	**Area of Composite Figures** Students find the composite area. Scaffolding includes composite figures with different levels of difficulty, two of which are relatively simple and two that are more complex.			✓		✓	
Do You See Them? 7.9(C)	**Area of Composite Figures** Students decompose composite figures on a grid and find the composite area.			✓		✓	
Lateral and Total Surface Area							
Can You Make Them? 7.9(D)	**Create Nets to Understand Surface Area** Students use nets to make 3-dimensional figures and derive a formula for surface area.	✓	✓		✓		
Prisms vs. Pyramids 7.9(D)	**Find Surface Area** Students find surface area of prisms and pyramids. Scaffolding includes a step-by-step process to find surface area including matching nets to a three-dimensional figure, drawing the net, the base, and the lateral faces. They compute area of the base, area of the lateral faces, and total surface area.		✓	✓		✓	
Surface Area Puzzles 7.9(D)	**Find Surface Area** Students fold nets to make figures. Then given area of the bases or faces, they find area of each face and total surface area.	✓				✓	
Find the Mistake: Surface Area 7.9(D)	**Correct Mistakes and Solve with Surface Area** In this find-the-mistake activity, mistakes include using wrong dimension in calculations, omitting one of the bases when finding total surface area, and finding total surface area instead of lateral surface area.		✓	✓		✓	