

Date_____



Why Do They Tessellate?

• What is the sum of the angles in a triangle?

• For each polygon shown, draw diagonals from one vertex to each of the other vertices.

Square





Regular pentagon



Regular octagon



Regular hexagon



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Why Do They Tessellate? (cont'd)

• Complete the table.

Polygon	Number of triangles	Sum of angle measures	Measure of each angle	360° ÷ angle measure
rectangle				
square				
regular pentagon				
regular hexagon				
regular octagon				
regular decagon				

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Why Do They Tessellate? (cont'd)

• Does a regular decagon tessellate? Justify your answer.

• Explain why some polygons tessellate and other polygons do not.