

Name: Amber Stanley	Date: August 29, 2017
Grade Level and/or Subject Area: 4 <sup>th</sup> grade/Math	School Site: Bartlett Elementary School
Lesson Title: Area/Perimeter – Piet Mondrian primary colors	Content/Arts Areas: Area/Perimeter – Piet Mondrian primary colors
Content Standards: 4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.	Arts Standards: Standard 6.0 Interdisciplinary Connections - Students will make connections between visual arts and other disciplines.
Materials: Piet Mondrian bio, Mondrian’s art pulled up on Promethean board, Card stock, ruler (for measuring and use as a straight edge), pencil, black marker, paint( red, blue, yellow), and paint brushes	Lesson Duration: (2) 50-minute lessons

**Guiding Questions/Big Ideas:**

- \*Why is it important to know how to calculate area/perimeter?
- \*What jobs would use this every day?
- \*How does Piet Mondrian’s artwork remind you of something you learned about colors in Art class?
- \*Why do you think I chose this artists work to teach you about area/perimeter?
- \*What do you notice about the lines on Mondrian’s art?

**Lesson Activities (in order of instruction):**

First lesson -

1. Show Mondrian’s bio/artwork PPT on Promethean board
2. Have short conversation about tiling a floor versus sewing lace on a rug
3. Pass out materials (only paper, pencil, and ruler for now)
4. Students will draw straight lines on paper like Mondrian’s art
5. Students will trace straight lines with black marker
6. Students will then get primary color paints and paint brushes and paint rectangles they have created

Second lesson –

1. Students will decide which 2 rectangles of the many they have created to measure using a ruler
2. Students will partner up to measure two rectangles using a ruler, partners will check each others measurements (to the closest inch)
3. Students will calculate perimeter and area of 2 rectangles out of the many rectangles they have created (see differentiation below)
4. Students will use a sheet protector and a dry erase marker to calculate area and perimeter for 2 chosen rectangles.

**Assessment Strategies:**

Rubric will be created to assess correct calculations of area and perimeter of the two measured rectangles.

Future instruction: A writing component will be added after mastery of the calculations of area and perimeter. Quick write: How is calculating area different from calculating perimeter?

## APPENDIX

Link to Mondrian art: <https://www.khanacademy.org/humanities/ap-art-history/later-europe-and-americas/modernity-ap/a/mondrian-composition>

Link to how to measure to tile a floor: <https://www.youtube.com/watch?v=7nzDuHaQomM>

Link to rug with trim: [https://www.potterybarn.com/products/color-bound-sisal-rug-black/?catalogId=84&sku=6829873&cm\\_ven=PLA&cm\\_cat=Google&cm\\_pla=Rugs%20%26%20Windows%20%3E%20Natural%20Fiber%20Rugs&kwid=productads-adid%5E202405455838-device%5Ec-plaid%5E328117595160-sku%5E6829873-adType%5EPLA&gclid=CjwKCAjwxJnNBRAMEiwA8X-QUs5cBW7yB\\_2\\_UrZ-dMvA4x22PJgvbzZhQxNWbOFUXaXBF8oqy-QhRoCBesQAvD\\_BwE&cm\\_ite=\[\[PLA\]%20-%20Good%20Desktop\]](https://www.potterybarn.com/products/color-bound-sisal-rug-black/?catalogId=84&sku=6829873&cm_ven=PLA&cm_cat=Google&cm_pla=Rugs%20%26%20Windows%20%3E%20Natural%20Fiber%20Rugs&kwid=productads-adid%5E202405455838-device%5Ec-plaid%5E328117595160-sku%5E6829873-adType%5EPLA&gclid=CjwKCAjwxJnNBRAMEiwA8X-QUs5cBW7yB_2_UrZ-dMvA4x22PJgvbzZhQxNWbOFUXaXBF8oqy-QhRoCBesQAvD_BwE&cm_ite=[[PLA]%20-%20Good%20Desktop])

**Differentiation:** High groups create calculate 5 rectangles together, low groups maybe only calculate 2 together (using sheet protectors and dry erase markers over their art)