

**Title:** Geometric Shapes in Miami Architecture

**Grades 9-12 ( can be adapted to any grade level):**

**Subject Areas:** Social Studies, Language Arts, Mathematics, Art

**Materials:**

Copies of Geometric Shapes Worksheet

<http://www.fun-stuff-to-do.com/images/GEOMETRIC-SHAPES-BASIC.jpg>

Pictures of Art Deco (South Beach), Moorish Revival (Opa-Locka), and Mediterranean (Coral Gables)

Paper, scissors and glue, pattern blocks

**Steps for implementation:**

- 1) The students will discuss various geometric shapes using the worksheet.
- 2) View video on geometric shapes

<http://www.youtube.com/watch?v=OUMUaxiPUlo>

- 3) With the whole class discuss three-dimensional shapes using items found in a classroom.
- 4) View the following video about three-dimensional shapes

<http://www.youtube.com/watch?v=K9L9I86N-xM>

- 5) The students will discuss how geometric shapes can be identified on buildings in our community.
- 6) The students will view pictures/visuals of different architecture styles in Miami (these are attached or online)and continue the discussion related to geometric shapes in buildings.
- 7) The students will work in groups to find as many geometric shapes they can find on the pictures of the buildings presented.
- 8) The students will share their findings with the group.
- 9) As a final activity the students will create their own architectural firm and advertise a new community they are planning to build.
- 10) The students will make a model of a community.
- 11) The criteria to build the community are that every model of a building includes at least 3 geometric shapes.
- 12) Display students' final products in the media center for the school and community to view.

**Enrichment Activities:** Organize and architectural fair outside the classroom and invite other classes or grade levels in order for students to present their work.

**ELL strategies:** hands-on activities, visuals, videos, translation

**Remediation:** Students can use a peer's model as a guide in order to complete project or get assistance from a peer tutor.

**Resources:**

Learning From Miami Video Segments:

<http://learningfrommiami.org/?p=425>

[http://learningfrommiami.org/?page\\_id=2](http://learningfrommiami.org/?page_id=2)

<http://learningfrommiami.org/?p=447>

[www.learningfrommiami.org](http://www.learningfrommiami.org)

**Other Resources:**

<http://www.fun-stuff-to-do.com/images/GEOMETRIC-SHAPES-BASIC.jpg>

<http://www.youtube.com/watch?v=K9L9l86N-xM>

<http://www.youtube.com/watch?v=OUMUaxiPUlo>

Coral Gables Mediterranean Visual:



Deco South Beach Visual:



Moorish Revival Opa-Locka Visual:

