

**MATH 394 FINAL PROJECT
ACTIVITY PAPER & PRESENTATION
Geometry for Elementary School Teachers**

Your Team

1. Email your choice for two or three final project team members to your instructor (see the course web page for details).
2. You will be assigned to a final project team of three or four students (see the course web page for details).

Research Component

Once your team has been assigned

3. With your team, review the Final Topic List linked below. Jot down activity ideas (see below). Feel free to use the Internet / Library / NCTM to research ideas.*
4. With your team, choose three topics and email them to your instructor (see the course web page for due date).

Number	Topic	Number	Topic
1.	Archimedean solids	7.	Pick's Theorem
2.	Flexagons	8.	Quilt blocks
3.	Frieze Patterns	9.	Sierpinski Carpet
4.	Golden Ratio / Rectangle	10.	Snowflakes and geometry
5.	M.C. Escher (drawings)	11.	Soma Cubes
6.	Möbius strip	12.	The Wheel of Theodorus

Other topics? You can ask for approval for other topics--one good resource is your class articles.

Once your team has been assigned a topic

5. With your team, find at least three reference sources for your specific topic. As a team, email your reference sources to your instructor for approval (see the course web page for due date).

*Your activity idea and write up have to be original, your team can not use an activity authored by someone else or taken from any resource.

- At most one of your references can be an online resource. Other ideas include our class text book, elementary school books, NCTM journal articles.
- Be sure to cc all team members in your email – email sent without all team members copied will be deleted.
- You will receive an email confirming your references are approved or asking for new references.

Paper and Activity Writing Component

Once your references are approved

With your team, write a short paper and write a new, mathematically relevant, fun and hands-on activity* about your team's topic that is focused on a simple geometry idea for kids.

1. (Formatting)

Paper should be approximately three pages long for the description and one or two pages long for the activity. The description pages should be; Arial Font 12, 1-inch margins, double-spaced and the activity page should be typed, but can use different fonts, fun pictures, etc.

2. (Content)

The description part of the paper should introduce and briefly explain your ideas in a way that makes sense, at a simple level, to a reader unfamiliar with the topic and include the following for a teacher who might use your activity:

- a. Activity name (something fun)
- b. Grade level of activity
- c. Activity topic and purpose
- d. NCTM Standards or Focal Points addressed (go to nctm.org and/or see 211 text)
- e. Suggested timing for activity
- f. Activity Materials & Classroom set up
- g. Notes / comments for teachers on how to run the activity
- h. (Brief) Summary, assessment or other concluding ideas

3. (References)

In addition to your three page paper and your activity page(s), include a bibliography for your paper; be sure to include the URLs for any web sources or web images. At least three reference sources are required.

Sharing & Presentation Component

1. (Sharing)

Email your instructor your paper and your activity prior to the scheduled final project presentations (dead week and finals week, see the course web page for details).

2. (Presentation)

Your team will be scheduled for 15 to 20 minutes (see course web page, this depends on the size of the class)

Introduction

As a team, give an approximately five minute interlocation about the topic and activity idea. You can be creative, but your introduction should include some professional presentation device such as a powerpoint, a poster, or? Just writing on the board, using your activity pages or using the overhead is not sufficient.

Activity

As a team with the rest of your scheduled time, have the class do your activity (or part of your activity). Your team is responsible for:

- a. Working with Breeann to make activity sheet copies
- b. Gathering all needed materials in advance of your activity
- c. Leading the class activity

(Practice)

Your team should practice your presentation carefully and completely. Both the class and your instructor will assess your team on their preparedness and delivery.

Assessment

Your final project is 15% of your course grade. The following is a breakdown of those 15 points. See your coursepack for sample assessment rubrics.

	Item	Percent
	Team meets deadlines	1
	Class assessment of introduction and overall presentation	3
	Class assessment of activity and of paper write up	3
	Instructor assessment of introduction and overall presentation	4
	Instructor assessment of written paper and written activity	4
	Total	15