

Choose a math game (or make your own) and write a lesson plan for teachers -- include grade level(s), materials, game type[^], learning goals, NCTM standards* addressed, preparation, directions for playing the game, student activity sheet w/ kid-friendly directions and questions to encourage students to engage in mathematical thinking, answers (for teachers), wrap-up debrief questions and/or teaching points. See rubric for more information. Work in groups of 2.

You will have an opportunity to do a 20 minute test-run of your game and student activity sheet in class and receive feedback from peers so you can do any revisions before the assignment due date.

There will not be peer grading for this assignment.

Ultimately, the goal is to produce something that is useful for math teachers. With your permission, the lesson plans will be published on a webpage and linked to a few popular websites frequented by math teachers looking for lesson plan ideas. If you choose an existing math game, please attribute the source.

Only one partner needs to attach the documents (lesson plan, student activity sheet, etc) with both partner's names but the other partner must also create and send in a submission with the person you worked with as a placeholder so I can assign you grades. Both partners will get the same grade and feedback.

[^]Game types (on handout given in class; also in moodle): Learn the language of mathematics, use mathematical notation, know facts, develop skills, understand concepts, devise strategies, combination of several types.

*National Council of Teachers of Mathematics (NCTM) published a set of standards for K-12 education in 2000. Many state standards, including Massachusetts, are based on the NCTM standards. The organization recently published Focal Points, which identifies the most important math topics by grade, for K-8 math education. For more information, check out website www.nctm.org. There are five content standards, and five process standards.

Content Standards:

- Number and Operations
- Algebra
- Geometry
- Measurement
- Data Analysis and Probability

Process Standards:

- Problem Solving
- Reasoning and Proof
- Communication
- Connections
- Representation

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