The exam will cover the subjects and activities from our labs this quarter. These activities were drawn from chapters 1-4 and 7 in your explorations manual and from handouts distributed in lab. Emphasis will be given to material since the midterm exam (chapters 3, 4, and 7).

To prepare for the exam, you should review the activities we covered and organize your lab notebook. You will be allowed to use your notes and completed handouts from this notebook, but not the textbook or explorations manual. Below is a list of the activities we have covered this quarter.

1. Chapter 1: Foundations for Learning Mathematics
   (a) 1.1: Patterns and Connections
   (b) 1.2: Real-life Problems
   (c) 1.3: Patterns and Proof
   (d) 1.4: Mastermind
   (e) Handout: Logic Puzzles
   (f) Handout: Glicks and Glocks

2. Chapter 2: Fundamental Concepts
   (a) 2.1: Understanding Venn Diagrams
   (b) Handout: Working with Venn Diagrams
   (c) Handout: Counting with Venn Diagrams
   (d) 2.4: Connecting Graphs and Words
   (e) Handout: Performing Algebra with Tiles
   (f) 2.7: Alphabitia
   (g) Handout: Modeling Numerals in Other Bases

3. Chapter 3: The Four Fundamental Operations
   (a) Handout: Modeling Addition and Subtraction in Other Bases
   (b) 3.6: Patterns in Multiplication Tables
   (c) Handout: Multiplication in Base Six
   (d) 3.8: Differences Between Multiplication and Addition
   (e) 3.16: Understanding the Standard Division Algorithm
   (f) Handout: Division in Base Six
   (g) 3.18: Operation Sense in Games

4. Chapter 4: Number Theory
   (a) Handout: Divisibility Tests
   (b) 4.1: Taxman
   (c) 4.2: Exploring Primes and Composites
   (d) Handout: The Locker Problem
   (e) Handout: Modular Arithmetic
5. Chapter 7: Data and Chance
   (a) 7.2: Population Growth and Density
   (b) 7.3: Collecting Data to Predict – Passing a Hand Squeeze
   (c) 7.10: Designing and Conducting a Survey
   (d) 7.5: Exploring the Concept of Average
   (e) 7.14: Using Sampling to Estimate
   (f) 7.16: Fair Games

Note: Activities covered at the beginning of our last lab will not be included on the lab final.