Lucas Numbers

The goal of the presentation is to discuss the Lucas numbers as well as other variants of the Fibonacci numbers. Your presentation should include at least

- An explanation of what the Lucas numbers are
- Some history of the Lucas Numbers
- At least 3 formulas relating the Lucas Numbers to the Fibonacci numbers
- A proof of the formula $L_n = F_{n-1} + F_{n+1}$.

In addition you should include at least one thing not on the above list (for example something about all variants of the Lucas/Fibonacci numbers obtained with different starting values).

At the end of your presentation the class will be asked one of the following questions.

- What is a recursive definition of the Lucas numbers?
- What is L_n in terms of Fibonacci numbers?
- If L_n is prime and greater than 20 what can we say about n?

A good starting point for your research is

http://en.wikipedia.org/wiki/Lucas_numbers

If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman