~~Write common recurrences down on the notepage.~~

~~Check the powerpoint. BRING A CALCULATOR~~

~~Topics Covered:~~

~~Asymptotic Growth:~~

~~-Compare order of growth~~

~~-Prove asymptotic notation using basic definition~~

~~-Worst case analysis (no average case)~~

Analyzing non-recursive algorithms

-Put on notesheet basic sumations like:

-arithmetic series

-geometric series

Analyzing recursive algorithms

-Defining recurrence

-Solving recurrence

-master theorem, iteration, recursion tree method, substitution method

Divide & Conquer Algorithms

-Mergesort & Towers of Hanoi are examples talked about in class

🡪 These were the basis of the recursive algorithms

Dynamic Programming

-Be familiar with all algorithms looked at: LCS, LIS**, Knapsack, Coin Change**, Rod Cutting, Palindrome *\*bolded means emphasized by teacher*

Greedy Algorithms

-Knapsack, Scheduling, Huffman Codes, Coins: **Applying greedy algorithms to new problems**

Theoretical definitions of big-O,Omega, and Theta.