NAME:

Directions:

CIRCLE any topics you would like to know more about
UNDERLINE all topics you feel comfortable with

1. **Basic C++ Principles:**
   Expressions, Control Flow, Functions, Classes, Program and File Organization

2. **Object Oriented Design:**
   Goals and Principles, Inheritance and Polymorphism, Templates, Exceptions, Recursion and Other Design Patterns

3. **Stacks, Queues, and Recursion:**
   Using Recursion, Stacks, Queues, Linked Lists, Double-Ended Queues

4. **Vectors, Lists, and Sequences:**
   Vectors, Lists, Sequences, Iterators

5. **Trees:**
   Abstract Data Type, Basic Algorithms on Trees, Binary Trees, Data Structures Representing Trees

6. **Priority Queues:**
   Abstract Data Type, Implementing a Priority Queue using a Sequence, Heaps, The Locator Design Pattern

7. **Dictionaries:**
   Abstract Data Type, Hash Tables, Ordered Dictionaries, Skip Lists, Locator-Based Dictionary Functions

8. **Search Trees:**
   Binary Search Trees, AVL Trees, Multi-Way Search Trees, (2,4) Trees, Red-Black Trees Locator-Based Search Trees, External Searching

9. **Sorting, Sets, and Selection:** Merge-Sort, The Set ADT, Quick-Sort, A Lower Bound on Comparison-Based Sorting Bucket-Sort and Radix-Sort, Comparison of Sorting Algorithms