

# AP Computer Science A Parent Guide

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.

1<sup>st</sup> 6 Weeks:  
Computer Science/ Programming Fundamentals/ Java Basics  
Objects, Methods and Classes  
Strings  
Boolean Logic and Conditionals

4<sup>th</sup> 6 Weeks:  
Arrays and Matrix Processing  
Extending Classes

2<sup>nd</sup> 6 Weeks:  
Boolean Logic and Loops  
Designing and Writing Classes  
Arrays and Processing

5<sup>th</sup> 6 Weeks:  
Recursion, Searching and Sorting  
Exam Review and Practice

3<sup>rd</sup> 6 Weeks:  
Arrays and Processing  
Lists and List Processing Array List

6<sup>th</sup> 6 Weeks:  
AP Practice Exams  
AP Computer Science A Exam