Exam Overview

The AP Computer Science A Exam assesses student understanding of the computational thinking practices and learning objectives outlined in the course framework. The exam is 3 hours long and includes 40 multiple-choice questions and 4 free-response questions. As part of the exam, students will be given the Java Quick Reference (see Appendix), which lists accessible methods from the Java library that may be included in the exam. The details of the exam, including exam weighting and timing, can be found below:

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	**Multiple-choice questions**	**40**	**50%**	**90 minutes**
II	**Free-response questions**	**4**		**90 minutes**
	Question 1: Methods and Control Structures (9 points)		12.5%	
	Question 2: Class (9 points)		12.5%	
	Question 3: Array/`ArrayList` (9 points)		12.5%	
	Question 4: 2D Array (9 points)		12.5%	

The exam assesses content from the three big ideas for the course:
Big Idea 1: Modularity
Big Idea 2: Variables
Big Idea 3: Control

The AP Exam also assesses each of the 10 units of the course with the following weighting on the multiple-choice section:

Units	Exam Weighting
Unit 1: Primitive Types	**2.5–5%**
Unit 2: Using Objects	**5–7.5%**
Unit 3: Boolean Expressions and `if` Statements	**15–17.5%**
Unit 4: Iteration	**17.5–22.5%**
Unit 5: Writing Classes	**5–7.5%**
Unit 6: Array	**10–15%**
Unit 7: `ArrayList`	**2.5–7.5%**
Unit 8: 2D Array	**7.5–10%**
Unit 9: Inheritance	**5–10%**
Unit 10: Recursion	**5–7.5%**

How Student Learning Is Assessed on the AP Exam

The AP Computer Science A computational thinking practices are assessed on the AP Exam as detailed below.

Section I: Multiple-Choice

The AP Computer Science A Exam multiple-choice section includes mostly individual questions, with one or two sets of multiple questions (typically two to three questions per set).

Computational Thinking Practices 1, 2, 4, and 5 are all assessed in in the multiple-choice section with the following exam weighting (Computational Thinking Practice 3 is not assessed in the multiple-choice section):

Computational Thinking Practice	Exam Weighting
Practice 1: Program Design and Algorithm Development	**30–35%**
Practice 2: Code Logic	**40–45%**
Practice 4: Code Testing	**12–18%**
Practice 5: Documentation	**12–18%**

Section II: Free-Response

The second section of the AP Computer Science Exam includes four free-response questions, all of which assess Computational Thinking Practice 3: Code Implementation. All five skills within this practice are assessed across the four free-response questions, with the following skill focus for each question:

Free-response question 1: Methods and Control Structures focuses on assessing students' ability to:

- write program code to create objects of a class and call methods (Skill 3.A)
- write program code to satisfy method specifications using expressions, conditional statements, and iterative statements (Skill 3.C)

Free-response question 2: Class focuses on assessing students' ability to:

- write program code to define a new type by creating a class (Skill 3.B)
- write program code to satisfy method specifications using expressions, conditional statements, and iterative statements (Skill 3.C)

Free-response question 3: Array/`ArrayList` focuses on assessing students' ability to:

- write program code to satisfy method specifications using expressions, conditional statements, and iterative statements (Skill 3.C)
- write program code to create, traverse, and manipulate elements in 1D array or `ArrayList` objects (Skill 3.D)

Free-response question 4: 2D Array focuses on assessing students' ability to:

- write program code to satisfy method specifications using expressions, conditional statements, and iterative statements (Skill 3.C)
- write program code to create, traverse, and manipulate elements in 2D array objects (Skill 3.E)