

# High School Day 1: Computer Science and Safety

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*Goal: Foster interest in participants to explore topics in the field of Computer Science.*

## Learning Objectives

- Introduce Students to topics in Computer Science and general Programming concepts
- Teach Students common parts of Computers and how they function to create larger computer systems
- Teach Students how various logic blocks function and how they can be used to build programs

## Resources and Materials

## Agenda Overview

1. [Brief History of Computers](#)
2. [Staying Safe Online](#)
3. [Parts of a Computer](#)
4. [Hour of Code](#)

## Time-permitting Activities

1. [Review Quiz](#)

## Agenda

### Brief History of Computers

10 minutes

1. Brief engaging Slideshow Presentation with Active Engagement describing how computers originated and how we got to where we are today with modern technology.

### Staying Safe Online + Netiquette

20 minutes

1. Describe common dangers of being online + how to mitigate them
  - Social Media Information
  - Malware
  - Phishing
  - Cyber Bullying
2. Short engaging verbal/ voluntary quiz

### Parts of a Computer

20 minutes

1. Show and explain the function of different common Computer components, including:

- Motherboard
- CPU
- GPU?
- RAM
- SSD/ HDD
  - Also explain the differences between an SSD and HDD
- Display
- HID

## Hour of Code

60 minutes

1. Give Students options for which Hour of Code exercises from [HourOfCode.org](https://HourOfCode.org) they would like to do and give them 60 minutes to complete them
2. If students finish their chosen exercise early, have them either pick a second one to complete or encourage them to explore a text-based language like js via the Khan Academy online js course or this [interpret python game](#).

## Review Quiz

20+ minutes

Exercise where students can solve questions based on the material covered previously during the session. All students will earn a cookie, but those who perform especially well on the whiteboard jepordy-style quiz can recieve extra snacks!