

Week Zero Lessons

	Computer Science Mindset	Navigating CodeHS	Setting Norms and Expectations	Careers and Code	Debugging and Problem Solving	Community Building
Objectives	Students will be able to identify and apply decomposition, pattern recognition, abstraction, and algorithms to solve a problem. Students will practice setting individual daily, weekly and quarterly goals and will learn to document them on a tracking document.	Students will be able to effectively navigate the CodeHS site, and articulate the purpose of the different features in the code editor.	Students will understand the expectations that are required of them in this course, and will be able to express their own perspectives on what expectations they have for themselves and others in the course.	Students will be able to articulate why Computer Science is a necessary and integral part of their education, and how it will become useful to them regardless of the career path that they choose.	Students will be able to use a series of debugging strategies to help them strategically solve problems that come up in their CS code.	Students will develop a sense of community in their classroom by learning more about their classmates and teacher, and will think about the classroom as a communal environment that they are to respect and nurture.
Lesson Plan (Option 1)	<u>Computational Thinking</u> <i>50 minutes</i> Students become secret agents who need to use their brains to crack codes! In this lesson, the concept of computational thinking is introduced as a set of problem-solving skills used by codebreakers and computer scientists. Students will define the four core concepts of computational thinking and apply them in a variety of activities. Students will work collaboratively to create and break simple codes.	<u>Explore the Code Editor</u> <i>50 minutes</i> Students work in groups to explore the CodeHS code editor, and some of the other features that are on the site, and create a poster board or video demo to showcase the different features on the site to their peers	<u>Yarn Activity</u> <i>50 minutes</i> Students reflect on their favorite classes and why they liked them so much, and what rules were enforced in those classes to make them enjoyable. Students then create rules for this course by participating in a full class activity where students share values that must be present in a safe, fun, and responsible classroom.	<u>Career Center Exploration</u> <i>50 minutes</i> Students will explore videos and readings about why CS is important, and discover the different ways that coding is used outside of the world of programming, and consider the ways that they can use coding in their own professional aspirations.	<u>Identifying Errors in Code</u> <i>50 minutes</i> In this lesson, students will circulate through different stations around the room in small groups. Each station will include 1 page of "broken" code. Students will practice isolating the problem, formulating a hypothesis, reproducing the error, and will ultimately fix the code. During that time they will also be recording the errors and bugs on a graphic organizer that they will be able to reference in a discussion after the activity.	<u>Story of Self</u> <i>50 minutes</i> Teacher shares their story of self with the class, explaining why they became a teacher, and giving students an insight into the person that they are outside of the classroom. Students then are given the opportunity to reflect on their own lives, and plan out presentations that they will then give to the rest of the class.
Lesson Plan (Option 2)	<u>Growth Mindset</u> <i>50 minutes</i> Students learn about the difference between growth and fixed mindset, and the benefit that growth mindset has on their development. Students also develop their own growth mindset posters to challenge some of the assumptions they have about their own thought process.	<u>Scavenger Hunt</u> <i>50 minutes</i> Students work in groups or independently on a CodeHS Scavenger Hunt, where students are required to navigate to the different home screens that they will be using throughout CodeHS, and perform a series of activities and free response questions.	<u>Digital Citizenship</u> <i>50 minutes</i> Students learn about digital footprints and digital citizenship, and explore their impact on the internet. Students sign CodeHS honor code, and brainstorm ways that they can improve the way that they use the internet safely.	<u>Block Coding Introduction</u> <i>50 minutes</i> Students explore the block coding interface and tools within the CodeHS editor. Using either JavaScript or HTML code block palette's students create simple programs using code blocks. They'll also learn how to toggle their code between blocks and text if enabled.	<u>How to get Unstuck</u> <i>50 minutes</i> Students learn debugging strategies by practicing on pseudocode, and create their own posters for how they can get unstuck when working on coding problems of their own.	