

1. Introduce yourself.

Example: Welcome to the Hour of Code! I am Dr./Ms./Mr. Code, and I volunteered to help with an Hour of Code because computer science is important, fun, and rewarding.

2. Introduce computer science, Computer Science Education Week, and the Hour of Code.

Example: Raise your hand if you can answer this question: What is computer science? [Possible responses: programming, coding, creating things with a computer, solving problems.] Here's one way to define computer science: solving problems using a computer, often, by writing code.

This is Computer Science Education Week, and millions of students will try an Hour of Code to learn about this exciting field. How excited are you about starting our activity today?

3. Describe why computer-science knowledge is important.

Example: Raise your hand if you can tell me why it's important to know about computer science and even how to code. [Possible responses: college, jobs, games, fun.] Great opportunities—and lots of jobs—await those who study computer science. More than 500,000 computer-science job openings exist in every state, in every industry. Speaking of every industry, where might we find computer science or programming in action? [Possible responses: games, mobile phones, computers, other entertainment.] Computer science is especially exciting because you can apply it in whatever field you find exciting. Interested in fashion? There are websites and apps that need to be built. Interested in being a veterinarian? You can solve mystery illnesses by analyzing data with code.

[Optional] How does computer science affect your daily life? What are you interested in, and how might you use computer science?

4. Video overview of the Hour of Code.

After connecting to the smartboard or projector, play the following linked video from Code.org containing celebrities endorsing the Hour of Code.

Two-minute video from Code.org: <https://youtu.be/FC5FbmsH4fw>.

5. Describe the agenda.

Example: Today we're going to learn about computer science and complete an activity in which YOU will write code. How many of you have written code before?

SAS CodeSnaps

Example: In this activity, you will write code with paper blocks to navigate a Sphero robot through an obstacle course. To do this, you will work in teams of three. Each team will consist of

a *domain expert*, a *software developer*, and a *tester*. The domain expert will investigate the obstacle course, draw a picture, measure the course, and make notes to guide the software developer, who will write the program using the paper blocks. When you think your program is ready, the tester will let me know, and I will scan your code into the iPad; the tester will then see how well the robot navigates the course. It's likely the tester will find some small mistakes, known as *software bugs*. The team will work to fix these bugs until the robot navigates the course successfully.

Leader notes: You'll likely need to encourage teams to assign roles and begin. Help the domain expert get started. Remind them that the Move Forward blocks use meters! This activity is good for leaders who are comfortable with iPads and Bluetooth-connected devices. For K-2 students, you may want to write the distance values on the course. Check out the obstacle course lesson here: <https://www.sascurriculumpathways.com/portal/#info/2775>. See this blog for tips and tricks.

Note: Download SAS CodeSnaps here, for free: <https://itunes.apple.com/us/app/sas-codesnaps/id1153615534?mt=8>

Support videos for CodeSnaps can be found here:
<https://www.youtube.com/playlist?list=PLILtGJkEhiG3cXlrfOZMiaa2zXXpKvA6k>

6. Wrap-up.

Example: Can some of you share what you learned today? [Possible responses: how to code, why it's important to be exact, specific, and detailed.] I hope you learned that computer science is a challenge you can meet and that it can be a lot fun.

If time allows, you may want to play this video as a closing:

<https://youtu.be/QvyTEEx1wyOY> (5 minutes from Code.org)