

3RD - 5TH GRADE CLUBS

CURRICULUM & RESOURCES



WELCOME TO YOUR CLUB!

Thank you for joining us in our mission to close the gender gap in tech by bringing the message of sisterhood and bravery to girls in your community.

In this packet, you'll find all the resources you need to...

- Create a fun and inviting space where girls build sisterhood and are inventive together.
- Challenge girls to be **brave** by speaking up and taking risks.

• Ignite girls' interest in **computer science**.

GETTING STARTED

Your Girls Who Code Club needs 3 key ingredients: copies of Learn to Code and Change the World, girls, and you - a dedicated Facilitator! The steps below explain how to use those ingredients to create a great experience for your girls.

SETTING UP YOUR CLUB

Step 1: Set yourself up for success by making a few key decisions before your Club meets. For example:

- How often will you meet? When?
- How many meetings will you hold in total? We recommend at least 5.
- Will your Club be unplugged, or will you try the online activities too?
- How many passages will you tackle each meeting?

Step 2: Gather a group of girls who are curious about reading, coding, or creating - they'll be perfect for your Club. Your Club can be as small as 2 girls or as many as you feel you can manage. Just make sure you have space for the girls and the resources you need! Also, make sure you know how to get your





RUNNING YOUR CLUB

Step 1: Meet, discuss the book, and try the activities. Use the <u>chapter guides</u> as a starting place, but feel free to add your own questions. Before each meeting, pick out the passage, questions, and activity for the day. Before ending a meeting, close out by asking each member to share something new they learned. Also, share highlights from your Club with the Girls Who Code Community on social media. We want to hear your insights and see your creations!

Step 2: Share your experience with us! Once your Club ends, we will reach out with a survey to learn about how it went. After you share your feedback, keep your eyes open for ways to renew your Club for next year!

RUNNING A CLUB MEETING



Each meeting, your goal is to find opportunities for girls to be brave, creative, and supportive. These flexible agendas, combined with the <u>chapter guides</u> that follow, will help you do just that!

IF YOU HAVE 45 MINUTES...

1. Build Sisterhood (5 minutes)

Make time for a quick activity that breaks the ice at the beginning of a meeting.
 Take a peek at the <u>Sisterhood Activity</u> Section for ideas.

2. Read & Reflect (15 minutes)

- Read a suggested passage from the book, and discuss the related questions. Check out our <u>Discussion Tips</u> to guide you.

3. GWC Challenge (20 minutes)

Complete one of the suggested activities that connects to the passage you read.
 Challenge your girls to be brave, bold, and creative! If you're trying an online challenge or using HQ with your students, read the <u>Logistics</u> section for more information.

4. Close-Out (5 minutes)

IF YOU HAVE AN HOUR OR MORE...

1. Build Sisterhood (10 minutes)

- Make time for a quick activity that breaks the ice at the beginning of a meeting. Take a peek at the <u>Sisterhood Activity</u> Section for ideas.

2. Read & Reflect (15+ minutes)

- Read a suggested passage from the book, and discuss the related questions. Check out our <u>Discussion Tips</u> to guide you.
- If time allows, consider reading another passage together!

3. GWC Challenge (20+ minutes)

Complete one of the suggested activities that connects to the passage you read.
 Challenge your girls to be brave, bold, and creative! If you're trying an online challenge or using HQ with your students, read the <u>Logistics</u> section for more information.

4. Close-Out (5 Minutes)

TIPS FOR A GREAT DISCUSSION

- 1. Preview the discussion questions before reading the passage. This will help girls focus their attention while reading.
- 2. Pick a girl to be the discussion **leader** for a meeting. The discussion leader will read the questions for the group, keep time, and encourage girls who haven't shared their thoughts yet to speak up.
- 3. Encourage girls to be **brave** by sharing their thoughts, even if they're not 100% sure of the answer.
- 4. Build **sisterhood** by introducing a silent or nonverbal way for girls to agree with each other during a discussion. For example, girls could snap if they agree with a point that another student shares.
- 5. Allow students to share with a partner before sharing their thoughts with the whole group. This can help them build up the confidence to share their ideas with the entire Club.

CHAPTER GUIDES

These guides are your map as you run your Club and explore *Learn to Code and Change the World!* Each time you meet, you should:

- **1.** Choose a passage for your Club to focus on.
 - Don't feel like you have to read everything we recommend - just choose what's right for your Club!
- **2.** Then, choose the questions you will discuss during the Read & Reflect portion of your Club.
- **3.** Finally, choose a related GWC Challenge for your Club to try!



TABLE OF CONTENTS

	PART 1: ALL ABOUT COMPUTER SCIENCE	
	• CHAPTER 1: WHY CODING?	5
	 CHAPTER 2: HOW TO TALK TO YOUR COMPUTER 	7
	 CHAPTER 3: PUTTING IT ALL TOGETHER 	8
	PART 2: GETTING STARTED WITH CODE	
	 CHAPTER 4: GETTING STARTED 	9
	 CHAPTER 5: CRACKING THE "CODE" 	10
	 CHAPTER 6: DEBUGGING 	11
•	PART 3: CODE IN REAL LIFE	
	 CHAPTER 7: VIDEO GAMES 	12
	 CHAPTER 8: DIGITAL ART AND DESIGN 	13
	CHAPTER 9: ROBOTS	14
	 CHAPTER 10: WEBSITES, MOBILE APPS, AND ONLINE SECURITY 	15
	CONCLUSION	16

CHAPTER 1: WHY CODING?

Passage 1: "Welcome" - Pg 11-18

Key Vocabulary

- **Code:** What people use to describe the steps a computer program should take.
- **Input**: The information and instructions that you give to the computer.
- **Output:** How a computer behaves based on a combination of your input and the code of the program.
- **Process**: The program that is running on your computer or device. It is how your computer turns your input into output!

Read & Reflect

- Based on what you've read, what do you think coding is?
- Think of your own example where an input starts a process. What is the output?
- The book provided some reasons why learning to code is important. Which reason seemed most important to you?

GWC Challenge

- **Unplugged Activity:** In small groups, create posters that spread the word about why learning to code is important, interesting, or cool! You can use examples from the book or your own ideas. Once you're done, post these in your school, library, or neighborhood to spread the word to other people your age.
 - Materials: Paper, markers, tape
- **Online Activity:** Scratch is a free, online coding language and online community. When working in Scratch, you use blocks to create animations and games while you code! To help you get started and learn how to use the platform, work with a partner to try the Getting Started with Scratch Tutorial.
 - Materials: Getting Started With Scratch Tutorial, Tips for Completing Online
 Activities