



## Teacher Guide: Learn to Code with Peep

Time: 40 minutes Grades: K+ Difficulty: Beginner

Students complete two do-it-yourself coding projects where they follow step-by-step instructions to code animated scenes using their favorite characters from Peep and the Big Wide World. At each step along the way, there are opportunities for your students to personalize the project, create custom assets, and express themselves creatively. Both of these activities have audio instructions on web to make them easier for early readers.

#### Activity Requirements:

Option 1: Laptops, desktops, or Chromebooks with a Web browser and an Internet connection **OR** 

Option 2: iPads or Android tablets with the free Tynker app from the App Store or Google Play Store

#### **Programming Activities**

We have two "Learn to Code with Peep" tutorials, Nature Walk and Dance with Friends. Once your students have learned the basics, they can create their own games and animations from a blank template. They can use assets from Peep and the Big Wide World and hundreds of other assets from the Tynker Media Library, as well as assets they draw or edit themselves.

The completed samples we provide are just for a basic version of the project and will allow you to help students who are struggling with bugs by providing an example of one possible way to implement the projects. However, there are unlimited ways to code these animations, and also to customize them. Students' final projects won't look exactly like the sample—and that's awesome!



Nature Walk (20 Minutes): Go for a nature walk with Peep! In this tutorial, students create an animated scene where Peep explores the world around him as he goes on a nature walk. Students will use code to make different items show up or disappear depending on where Peep is walking. They can even make the items talk and add music to their scene! This activity teaches the basics of block coding, including how to sequence code blocks and use events to trigger code. Completed Sample



Dance with Friends (20 Minutes): Make Peep and his friends dance! In this fun activity, students program an animated dancing scene using the characters from Peep and the Big Wide World. They'll use costumes and delays to animate the birds one frame at a time. They can add their own backgrounds and music and even make Peep and his friends talk!As they code, they'll learn about loops and frame-based animations. Completed Sample

How to Prepare for the Hour of Code





- Sign Up for a Teacher Account Although an account is not required, creating a free teacher account will allow you to access teacher guides, answer keys, and tons of additional resources. You'll also be able to create free accounts for your students, monitor their progress, and see their projects.
- **Create Student Accounts** From your teacher account, you can easily create free student accounts for all your students. This will allow them to save their projects and progress, so they can continue coding when they get home! Again, this is not necessary to complete an Hour of Code.
- **Try It Out** Play around with Tynker before your Hour of Code to familiarize yourself with the activities and the Tynker Workshop.
- Update Your App If you're using the Tynker App for tablets, make sure that you have the most recent version of the app downloaded. Older versions may not have all the necessary content to run this year's Hour of Code.



## Hour of Code Certificate

Be sure to download a personalized certificate for your students when they complete this activity.

#### **Standards Mapping**

CCSS ELA: RI.1.3, RI.2.3, RI.3.3, W.1.6, RI.1.10, RF.1.4, RF.2.4, RL.1.3 CSTA: L1:3.CT.2, L1:6.CT.1, L1:6.CPP.3, L1:6.CPP.5, L1:6.CPP.6





# Teacher Guide to Tynker Hour of Code

Tynker's activities combine structured and open-ended components to support multiple learning styles. This experience emphasizes that programming requires not only knowledge of how to use a language, but also creativity and critical thinking to figure out how to build projects. Tynker is offering a wide variety of activities appropriate for all grades and experience levels.

### What Tynker Provides

- Self-contained, game-based activities that students can complete with minimal support
- A combination of structured and open-ended activities that teach and allow students to create
- Puzzle solutions for all of our puzzles so you can give hints to any students who get stuck
- Common Core alignment for all activities
- A customized Hour of Code certificate for each activity that will show up in the student dashboard when a student completes an hour of programming

### Why Children Love Tynker

- Tynker puzzles use game-based learning to teach programming and computational thinking concepts in a fun way
- Tynker tutorials guide students through all the steps to create storytelling projects, games, animations, and much more
- The Tynker Workshop allows students to create anything they can imagine with code
- Tynker's built-in Physics Engine makes it easy to create exciting projects
- Tynker's high quality media assets give students tons of creative options

#### **Recommended Setup and Logistics**

- Ideal environment: a computer lab, library, or classroom with your class
- Students can work individually or in pairs
- Students should have headphones if possible, but if not, you can turn the computer volume down
- Set up a free teacher account on tynker.com prior to the activity and add your students so you can track their progress and share a class showcase—and so students can continue working at home! (Note: Creating a teacher account is optional. You can complete your Hour of Code with Tynker without creating an account.)

We hope you take a look at all of our Hour of Code activities to figure out which one is right for your class. Join the global movement and host your Hour of Code with Tynker!