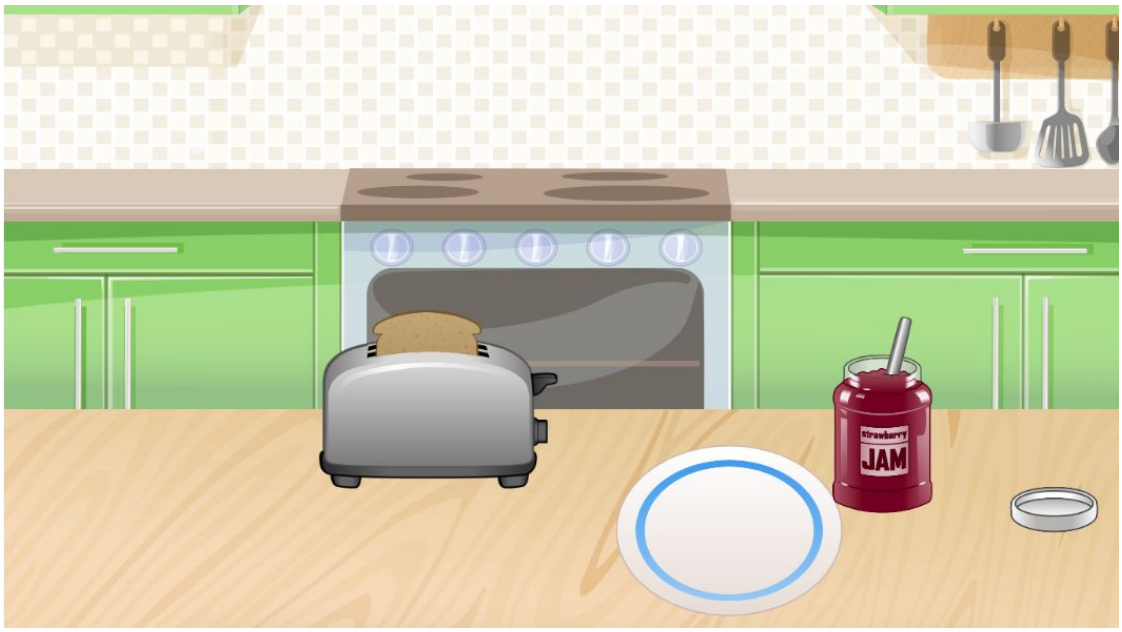
Cooking Game Teacher Guide



Summary

- Web address: **tynker.com/hour-of-code/cooking-game**
- Coding skill level: **Intermediate**
- Recommended grade level: **Grades K-5**
- Time required: **40 minutes**
- Number of modules: **1 module**
- Coding Language: **Block-based**

Teacher Guide Outline

Welcome!
- How to Prepare

Activity
- Activity Overview
- Getting Started (10 minutes)
- DIY Module (30 minutes)
- Extended Activities

Going Beyond an Hour
- Do More With Tynker
- Tynker for Schools

Help

Welcome!

Things are about to get yummy in this Hour of Code lesson! Students will follow a step-by-step tutorial to code a cooking game about making toast and adding jam. Additionally, students can create their own cooking game that features their favorite food. By the end of this Hour of Code lesson, students will have combined creativity, imagination, and coding concepts (e.g., sequencing, simple conditionals, conditional loops, motion, and advanced costume handling) to create a cooking game.

How to Prepare

This activity is designed for self-directed learning. Your role will be to help students individually and facilitate as students complete the coding activities on their own. The best way to prepare is to:

1. **Familiarize yourself with the material.** After selecting your Hour of Code lesson (e.g., Cooking Game), read through the teacher guide and complete the activity before assigning it to students. This will allow you to troubleshoot anything in advance and plan for potential questions from your students.
2. **Get students excited about coding.** Inspire students and get them excited for the Hour of Code event. Here is a link to resources such as inspirational videos and posters from the Hour of Code website: https://hourofcode.com/us/promote/resources#videos
3. **OPTIONAL: 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.
4. **OPTIONAL: 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.
5. **OPTIONAL: Print certificates to hand out.** While signed in to your Tynker teacher account, you can print certificates by clicking on a classroom from your teacher dashboard, clicking the "Gradebook" tab, going to "Hour of Code," and clicking the "Print All Certificates" button. This will only print certificates for student accounts assigned to the selected classroom.

Activity

To begin Cooking Game, have your students open a browser tab to this URL:
tynker.com/hour-of-code/cooking-game

Overview

Objectives

Students will...

- Apply coding concepts such as sequencing, conditional loops, motion, and advanced costume handling to code a cooking game
- Use code blocks to create a cooking game

Materials

- **For web:** Computers, laptops, or Chromebooks (1 per student)
- **For mobile:** iPads or Android tablets (1 per student)

Vocabulary

- **Code:** The language that tells a computer what to do
- **Sequence:** The order in which steps or events happen
- **Command:** A specific action or instruction that tells the computer to do something
- **Condition:** A logical expression that evaluates to true or false
- **Loop:** An action that repeats one or more commands over and over
- **Conditional loop:** A loop that performs an action if a certain condition is met

Standards

- **CCSS-ELA:** RI.K.1, RI.K.10, RF.K.4, SL.K.1, RF.1.4.A, RI.1.10, SL.1.1, RF.2.4.A, RI.2.5, SL.2.1, RI.3.7, RF.3.4.A, SL.3.1, RF.4.4.A, RF.1.4.A, SL.4.1, RF.5.4.A, SL.5.1
- **CCSS-Math:** MP.1, K.CC.A.2, K.CC.A.3
- **CSTA:** 1A-AP-09, 1A-AP-10, 1A.AP-11, 1A-AP-14 ,1A-AP-15, 1B-AP-10, 1B-AP-12, 1B-AP-15, 1B-AP-17
- **CS CA:** K-2.AP.10, K-2.AP.11, K-2.AP.12, 3-5.AP.10, 3-5.AP.11, 3-5.AP.12, 3-5.AP.17
- **ISTE:** 1.c, 1.d, 5.d, 6.b, 7.c

Getting Started (10 minutes)

1. Tell students that they are going to code a cooking game on Tynker.
2. Use your projector to display Cooking Game: **tynker.com/hour-of-code/cooking-game.**
3. Go to “Step 2/6” of the tutorial and show students the cooking game examples:

4. Optional: Read the Cooking Game tutorial out loud to your students.

DIY Module (30 minutes)

This lesson has one DIY (do-it-yourself) module. Facilitate as students complete the Create a Cooking Game module on their own:

1. **Create a Cooking Game (DIY)**

- In this DIY, students will create a game about making toast and adding jam.
- Tell students to follow the step-by-step instructions and drag blocks from the tutorial tab to the center coding area.
- If students want to expand on their project…
    - Direct their attention to “Step 6/6” of the tutorial. This step includes additional project ideas such as making the bread fly up into the air when it’s done toasting, making the bread get darker the longer it’s left in the toaster, and spreading the jam with the “pen” code blocks.
- If students want to create their own cooking game…
    - Encourage them to experiment with their code by combining new code blocks to parts of their code from the tutorial OR slightly modify part of their code from the tutorial.
    - Tell students to use the provided Actors, code blocks, and backgrounds from the Media Library. Here’s a link to Tynker videos that demonstrate how to add a scene, add an Actor, and draw an Actor: https://www.tynker.com/support/videos. Will your students create a cooking game that features breakfast, lunch, or dinner food items?

Extended Activities

Discussion

Reflect on today’s coding adventure by leading a discussion with your students:

- What was their favorite part about today’s Hour of Code activity? Why?
- Were there any parts they found tricky? Discuss.
- Encourage students to describe some of the cooking games they coded: What type of cooking game did they make? Did anyone create a breakfast-themed cooking game? What were some other food Actors they used?

- What is code? (The language that tells a computer what to do)
- What is a conditional loop? (A loop that performs an action if a certain condition is met)

Going Beyond an Hour

If your students enjoyed an Hour of Code, they're sure to enjoy the rest of what Tynker has to offer! Tynker offers a complete premium solution for schools to teach Computer Science. Over 400 hours of lessons are available to take K-8 students from block coding to advanced text coding. We offer tons of resources for teachers, including comprehensive guides, free webinars, and a forum to connect with other educators.

More Hour of Code Activities

Tynker offers many other tutorials for the Hour of Code, including STEM Hour of Code lessons that you can integrate into the subjects you already teach. Check out the main Tynker Hour of Code page to see all the tutorials!

Do More with Tynker

With Tynker, kids don't just acquire programming skills--they can explore the world of possibilities that coding opens up. Tynker has several interest-driven learning paths that make coding fun, both inside and outside the classroom:

- **Coding and Game Design:** Your students can use Tynker Workshop, a powerful tool for crafting original programs to make games, stories, animations, and other projects. They can even share their work with other kids in the Tynker Community.
- **Drones and Robotics:** Tynker integrates with connected toys, including Parrot drones and Lego WeDo robotics kits, so kids can see their code come to life.
- **Minecraft:** Tynker integrates with Minecraft so your students can learn coding through a game they love. Tynker offers skin and texture editing, as well as a custom Mod Workshop that lets kids try their original code in Minecraft.

Tynker for Schools

Used in over 80,000 schools, our award-winning platform has flexible plans to meet your classroom, school, or district needs. All solutions include:

- Grade-specific courses that teach visual coding, JavaScript, Python, robotics and drones
- A library of NGSS and Common Core compliant STEM courses that are great for project-based learning
- Automatic assessment and mastery charts for whole schools and individual classes and students
- Easy classroom management with Google Classroom and Clever integration
- Professional training, free webinars and other teacher training resources

Need help getting Tynker started at your school? Contact us to learn more about teaching programming at your school with Tynker!

Help

Need help? Below you'll find answers to frequently asked questions about Hour of Code and using Create a Cooking Game.

What is Hour of Code?

The Hour of Code is a global learning event in which schools and other organizations set aside an hour to teach coding. No prior coding experience from you or your students is needed! The event is held every December during Computer Science Education Week. You can also organize an Hour of Code year-round. The goal of the Hour of Code is to expand access to computer science education for people of all backgrounds. Learning computer science helps students develop logic and creativity, and prepares them for the changing demands of the 21st century. Tynker has been a leading provider of lessons for the Hour of Code since the event began in 2013. Since then, over 100 million students from 180 countries have finished an Hour of Code.

How do I prepare for Hour of Code?

1. **Familiarize yourself with the material.** After selecting your Hour of Code lesson (e.g., Cooking Game), read through the teacher guide and complete the activity before assigning it to students. This will allow you to troubleshoot anything in advance and plan for potential questions from your students.
2. **Get students excited about coding.** Inspire students and get them excited for the Hour of Code event. Here is a link to resources such as inspirational videos and posters from the Hour of Code website: https://hourofcode.com/us/promote/resources#videos
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How do I open Cooking Game?

Have your students open a browser tab to this URL:
tynker.com/hour-of-code/cooking-game

Who is this activity for?

Cooking Game is intended for students in grades K-5 with some coding experience.

How do my students play Cooking Game?

Students will begin by completing a step-by-step tutorial to create a game about making toast and adding jam; from there, students can expand on their project by making the bread fly up into the air when it's done toasting, making the bread get darker the longer it's left in the toaster, or spreading the jam using the "pen" code blocks. Students can also use the provided Actors, code blocks, and backgrounds to create their own cooking game that features their favorite food!

What will my students learn?

Students will combine creativity, imagination, and coding concepts (e.g., sequencing, conditional loops, motion, and advanced costume handling) to create a cooking game. Students can also expand on their project while experimenting with new and different code blocks. In this process, students will develop debugging skills, conditional logic, and logical reasoning skills.

What devices do I need?

- **For web:** Computers, laptops, or Chromebooks (1 per student) with an internet connection and an up-to-date browser
- **For mobile:** iPads or Android tablets (1 per student) with an internet connection
- If not enough devices are available, students can work in pairs on the same device

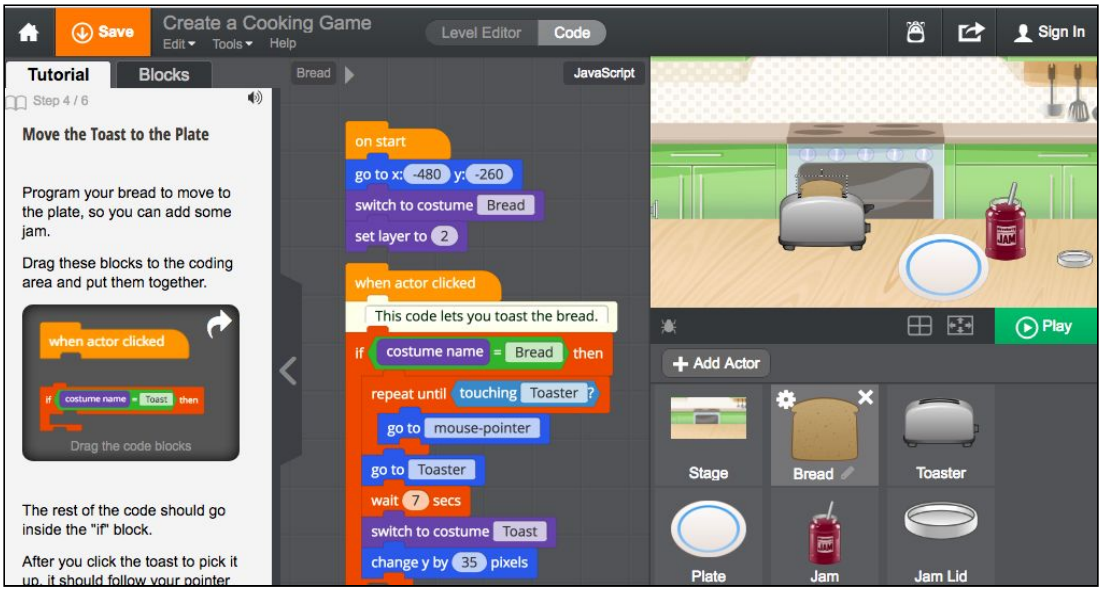
Do I need to create a Tynker Account for my students?

No, you do not need to create a Tynker account for your students.

How can Tynker help me manage my Hour of Code?

Tynker has several free features for registered teachers that will help you manage your Hour of Code. If you set your students up with a Tynker classroom, you will be able to track their progress and print Hour of Code completion certificates for them to keep.

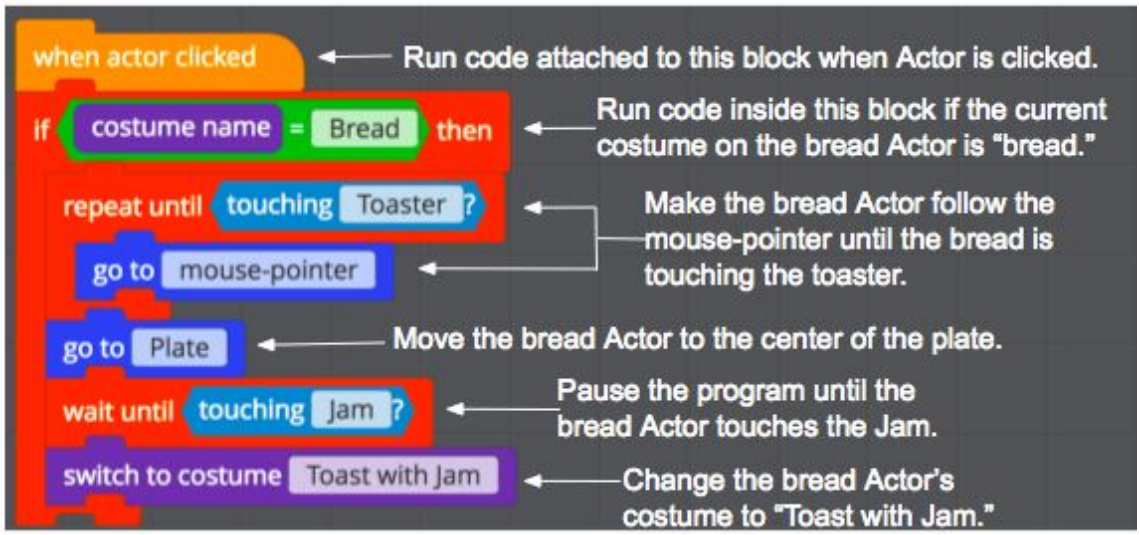
How do my students code their Actors?



The Cooking Game DIY module includes a workspace for students to code their cooking game. The section on the left is a tutorial tab that provides step-by-step directions to code a bread Actor, describes what is happening for each step, and provides the necessary code blocks. Tell students to follow the step-by-step instructions and drag blocks from the tutorial tab to the center coding area.

What do the code blocks do?

In this lesson, students will code a bread Actor that uses conditions to check what's going on. Below is pseudocode for the bread Actor:



How can I contact the Tynker support team?

If you have any issues or questions, send us an email at support@tynker.com