



Computer Programming Lesson Plan: Grade 2

Grade Level: **Second Grade** | Duration: **Two days, 30 minutes per lesson**

Objective

In this lesson, second graders use BrainPOP Jr. resources to learn the basic principles of computer programming.

Students will:

- 1. Build Background Knowledge:**
 - Watch the BrainPOP Jr. Computer Programming movie.
- 2. Think and Do:**
 - Word Play: Draw a picture of a domain-specific vocabulary word.
 - Activity: Follow instructions to find Moby on a map.
- 3. Assess:**
 - Take the Computer Programming quiz.

Preparation



- Preview the BrainPOP Jr. movie [Computer Programming](#) to plan for any adaptations.
- Read [Computer Programming Background Information](#).
- Create and schedule Day 1 assignment: [Computer Programming Movie](#) and [Word Play](#).
- Create and schedule Day 2 assignment: [Computer Programming Movie](#), [Activity](#), and [Easy Quiz](#).

Before the Lesson

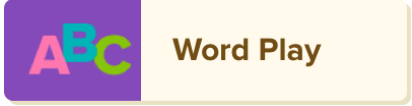
Background knowledge helps students make sense of new ideas and experiences. To activate prior knowledge, ask these questions:

- *Think about a time when you had to follow a set of directions. What would happen if you skipped a step?*
- *Think about your favorite computer game. How do you think it was made?*

DAY 1: Build Background (10 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  </div> <p>1. Watch the Computer Programming movie. Click pause whenever a question appears in Annie’s Notebook. Discuss the question, then click play for Annie’s response.</p> <p>TIP: Pause turns red to remind you to pause.</p> <div style="text-align: center;">  </div>	<ul style="list-style-type: none"> ● Print the movie transcript and Annie’s Notebook for a grown-up to read aloud. ● Have a student play Moby and “beep” in response to Annie. ● Read aloud a grade-level sentence two times while tracking with your finger. Then track again, word-by-word as students repeat the words. Do this for three sentences. 	<ul style="list-style-type: none"> ● Set a specific viewing purpose for individual students or small groups based on lesson objectives and student readiness. For example, have students focus on ways we use computer programs everyday. ● Pause at two key points and prompt students to summarize. ● Support recall by having students draw one or two key ideas from the movie. 	<ul style="list-style-type: none"> ● Pause for new vocabulary. Use the word in a sentence. Prompt students to say the word and repeat the sentence. Invite them to draw a picture of the word. ● Create a word wall with vocabulary and the drawing. ● Pause at key points and ask discussion questions from Annie’s Notebook in the student’s home language or English.

DAY 1: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  </div> <p>2. Students open their Word Play assignment. Or, if not using Assignment Builder, model how to open Word Play.</p>	<ul style="list-style-type: none"> ● Print the “Draw!” page for the word a student chooses. ● Students draw their pictures in the boxes next to each word 	<ul style="list-style-type: none"> ● Model how to use drawing tools. ● Assign appropriately challenging words to individual students. ● As a challenge, have students create a drawing for more than one word. 	<ul style="list-style-type: none"> ● Say student’s selected Word Play word in their home language. Then say it in English. Have students repeat it in English.



Students click one of the words and choose the “Draw!” tab.

They create a drawing that illustrates the word.

When they finish, students click **Save**, then **Submit To Teacher** and/or print out.

- Use the **word in a sentence**. Prompt students to say the word and repeat the sentence.
- Hover over the prompt to hear it read aloud. **Repeat the prompt in students’ home language.**

DAY 2: Build Background (5 minutes)

Lesson Steps

Offline Modifications

Modifications for Diverse Learners

ELL/Language Development



3. Watch the [Computer Programming](#) movie again.

Prompt students to find a fact or something new that they didn’t notice the first time.

- Students return to their drawings of **key concepts from the first viewing** and add new details or create new drawings.
- As a **challenge**, invite students to identify more than one new fact.

DAY 2: Think & Do (20 minutes)

Lesson Steps

Offline Modifications

Modifications for Diverse Learners

ELL/Language Development



Activity

- Students open their Activity assignment. Or, if not using Assignment Builder, model how to open [Activity](#).

Have students hover their mouse over the prompt to hear it read aloud. Then have them click the Start arrow to begin, and click PRINT at the bottom of the page. Then they follow the instructions to help Moby find the treasure.

- **Print out** and share the Activity with students. **Review the directions**, and have students complete the page.

- Before starting, have students **predict** where the treasure will be found.
- **Challenge** students to write different directions to get to the same spot on the map.
- **Increase the amount of time** a student has to complete the activity.

- Read aloud the activity in students' **home language or English to review the directions**.

DAY 2: Assess (5 minutes)

Lesson Steps



Easy Quiz

- Students open their Quiz assignment. Or, if not using Assignment Builder, model how to open the [Easy Quiz](#).

If you assigned the quiz, you will see students' results in your Dashboard. If not assigned, students click the **Submit to Teacher** button.

Offline Modifications

- **Print** the [Easy Quiz](#). **Read aloud** the questions and answers.

Modifications for Diverse Learners

- Hover over the **questions** and answers to hear them **read aloud**.
- **Reduce the number** of questions and/or possible answers (using the Quiz Mixer).
- **Support recall** by revisiting movie drawings.

ELL/Language Development

- **Read aloud** the quiz in students' home language.
- **Highlight the key vocabulary** in a printable version of the quiz.
- **Support recall** by having students review drawings they made during the movie.

