

MISSION 1: Welcome to CodeSpace		Time: 30-40 minutes
<p>Overview:</p> <p>These first missions are all about getting to know the Codespace user interface and the CodeX hardware. In this early stage, the most important guidance is to carefully read the instructions. Use the materials in the folder to help students read and understand the instructions.</p>		<p>Cross Curricular:</p> <p>This section will detail areas where the CodeX mission compliments another core subject.</p> <ul style="list-style-type: none"> • Supports language arts through reflection writing
<p>Materials Included in the learning portal Teacher Resources:</p>		
<p>Mission 1 Sliddeck</p> <p>The slide deck is for teacher-led instructions that let you guide students through the material using the slides. It is an alternative to the students reading a lot of instructions in CodeSpace. The slides mirror the instructions, with simplified language that is chunked into smaller sections at a time. The information shown on slides with “Objective”. The tasks to complete are on slides with “Mission Activity”. The slides also tell the students when to write something in their Mission Log.</p>		
<p>Mission 1 Workbook</p> <p>The workbook can be used instead of slides for student-led or independent work. It is an alternative to students reading a lot of instructions in CodeSpace. It mirrors the instructions (and the slide deck), with simplified language that is chunked into smaller sections at a time. Each objective is on its own page. The tasks to complete are labeled “DO THIS” and have a robot icon next to it. The workbook also tells the student when to write something in their Mission Log. The workbook for Mission 1 is a little wordier than future workbooks.</p>		
<p>Mission 1 Log</p> <p>This mission log is the worksheet for students to complete as they work through the mission. It includes warm-up questions (called pre-mission preparation) and wrap-up questions (post-mission reflection) as well as questions along the way. It should be printed and given to each student before the mission starts. They write on the mission log during the assignment and turn it in at the completion of the mission (assignment).</p>		
<p>Mission 1 Lesson Plan</p> <p>The lesson plan comes from the original CodeX Teacher Manual and is included here for easy reference.</p>		
<p>Additional Resources:</p> <ul style="list-style-type: none"> • Short CodeX video (on youtube and Firia website) • CodeX video on youtube 		<p>Formative Assessment Ideas:</p> <ul style="list-style-type: none"> • Exit ticket • Mission log completion
<p>Vocabulary:</p> <ul style="list-style-type: none"> • Objective: The steps in the mission; has a goal to accomplish • Text Editor: Where you type the code • Code: Instructions to the computer • Toolbox: A place in CodeSpace to keep information you learn about programming concepts so you can use it later when you need the information • Debugging: Fixing your code 		

Preparing for the lesson:

Students do not need the Codex for this lesson.

- Log in to CodeSpace (sim.firialabs.com) and make sure it works on the browser your students will use.
- Look through the slide deck and workbook. Decide what materials you want to use for presenting the lesson. The slide deck can be projected on a large screen. The workbook (if used) can be printed or remain digital through your LMS.
- Be familiar with the mission log (assignment) and the questions they will answer.
- Print the Mission Log for each student.
- If you have a word wall, or another form of vocabulary presentation, prepare the new terms.
- Watch the videos and decide if you want to show either one at some point during the lesson (beginning or end to build motivation)

Lesson Tips and Tricks:

Teaching tip:

You can use a variety of discussion strategies to get the most engagement from your students. For example, you can have students write their answers before asking anyone for an answer. You can use one of many think-pair-share methods. You can have students write their answer and share with someone, and then have other students share answers they heard from their peers. You can randomly select students to answer.

Pre-Mission Discussion: -- slides 2-3, page 1

Students can write in their log first and then share, or discuss first and then write in their log.

- What do you know about computer science or programming?

Pre-Mission Activity:

Give the Python pre-test. Use the link above (not your own copy). Optional -- this can be done at the end of the lesson instead.

Mission Activities:

Most of this lesson is on the computer, learning about CodeSpace. Students do not need the CodeX for this lesson, but they will need a computer or laptop and access to the Internet. The Chrome browser works best, but other browsers also support CodeSpace.


Each student will complete a Mission Log.

Students could work in pairs through the lesson, or can work individually.

Teaching tip: Objective #4 -- slides 10-11, page 6

Students will use the camera controls to spin the robot. This can be a little tricky. You may want to practice this first. To meet the goal, the robot will have to spin several times.

Teaching tip: Quiz -- Slide 12, page 7

Students take a  short quiz at the end of the mission. Decide if you need to go over the quiz questions with your students. Quiz questions below.

Post-Mission Reflection:

The post-mission reflection is set up in the 3-2-1 format. You can change the questions if there is something else



you want to emphasize with your students.

- Three things you learned
- Two things you want to learn more about
- One question you have

You could show a CodeX video to increase motivation, if you didn't show one in the last lesson.

End by collecting the Mission Log and any formative assessment you want to include.

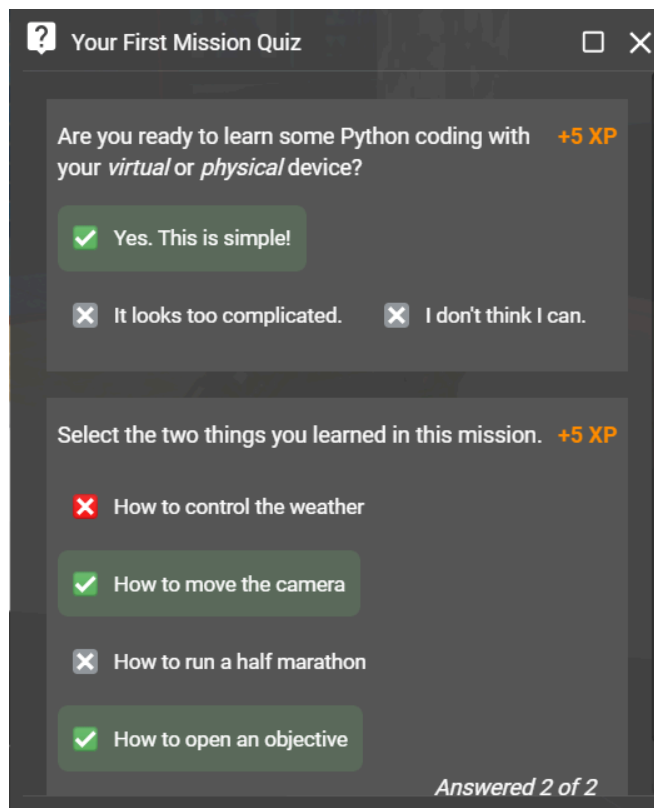
Post-Mission Activity (if not done as pre-mission activity):

Give the Python pre-test. Use the link above (not your own copy).

SUCCESS CRITERIA:

- Identify major parts of the CodeSpace interface: Mission Bar, Objective Panel, text editor, CodeTrek, Toolbox, and Lesson Navigation Controls

? Quiz Questions



The screenshot shows a quiz window titled "Your First Mission Quiz" with a question mark icon and window controls. It contains two questions:

Question 1: "Are you ready to learn some Python coding with your *virtual* or *physical* device? +5 XP". The options are: "Yes. This is simple!" (checked), "It looks too complicated." (unchecked), and "I don't think I can." (unchecked).

Question 2: "Select the two things you learned in this mission. +5 XP". The options are: "How to control the weather" (unchecked), "How to move the camera" (checked), "How to run a half marathon" (unchecked), and "How to open an objective" (checked).

At the bottom right, it says "Answered 2 of 2".