Zion International School of Phnom Penh

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ZION INTERNATIONAL SCHOOL OF PHNOM PENH

"GROWING THE FUTURE ONE CHILD AT A TIME"

Semester 1 Test
Academic Year 2024-2025
Date: December 10ᵗʰ, 2024

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Subject:	Cambridge Computing
Level:	Grade 4
Time:	10:30-11:15 PM
Duration:	45 minutes

Student's Name:

_____

Instruction

I.   Login to your scratch account
II. Go to class studio, open **Starter Grade4-Semester1-Test**, click on the project then **remix** or go to the starter project: https://scratch.mit.edu/projects/1106890916/
III. Follow the instructions to complete the project
IV. After you complete the project, click on **Share** then **Add to Studio**, add to **Grade4-Semester1-Test**

Topic

We will code an interactive music staff, with animated instruments that use different kinds of iteration.
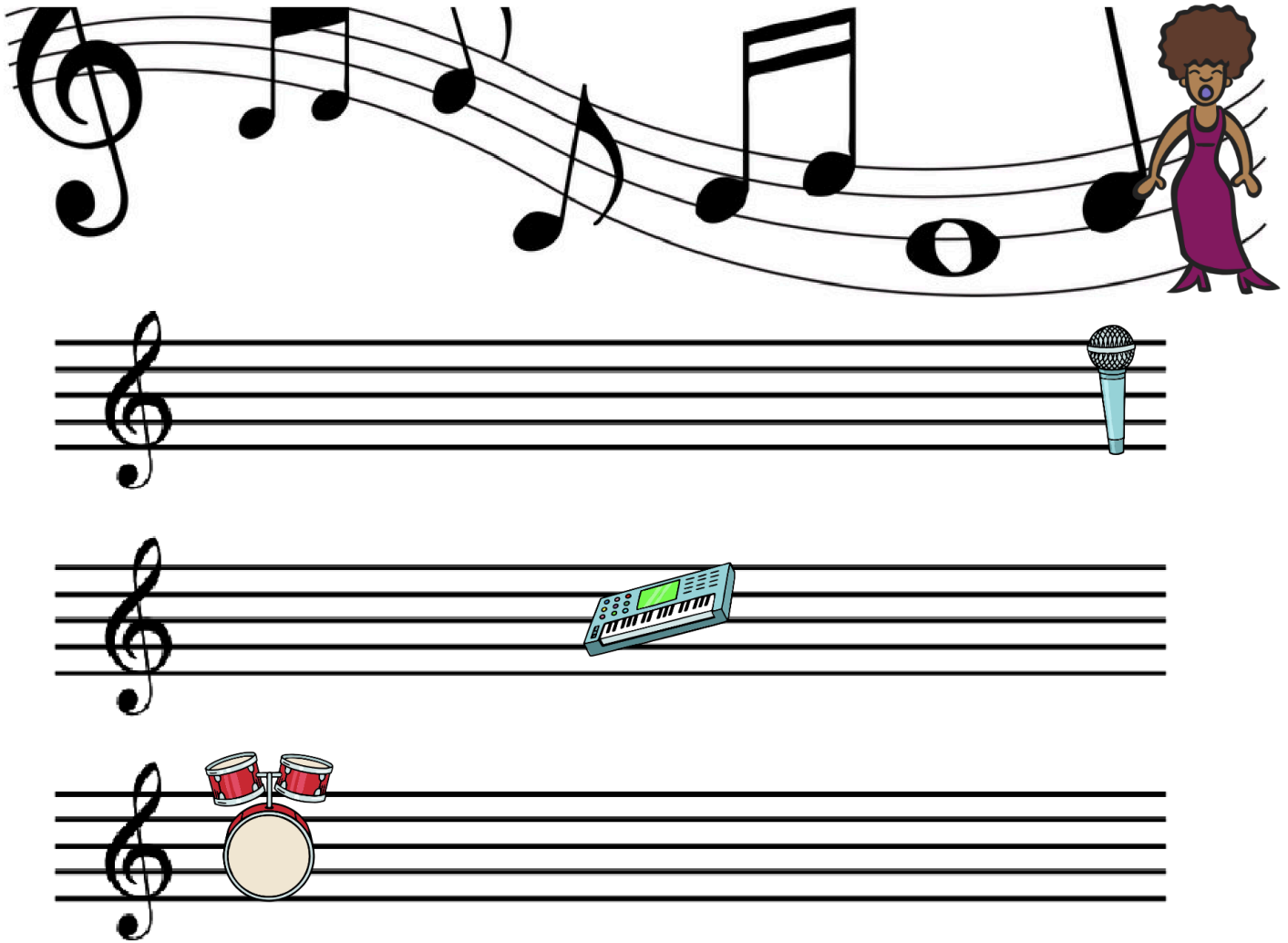
There are 3 tasks:

1. Make the drum track.
2. Make the keyboard track.
3. Code the microphone track.

Make the drum track.

The drums will pl;pay when the "d" key is pressed.
You will use a count-controlled iteration to keep the drums on the music staff.

Add the following code to the drum sprite:

1.	When "d" key pressed
2.	Go To x: -130 y: -130
3.	Repeat 0
3.1.	Next costume
3.2.	Move 50 steps
3.3.	Play sound "Drum bass 3" until done
3.4.	Play sound "Low Tom" until done
3.5.	Play sound "Low Tom" until done

Change the number of iterations to keep the drum on the music.

Make the keyboard track.

The keyboard will play forever, when the green flag is clicked.

Add the following code to the keyboard sprite:

1.	When green flag clicked
2.	Forever
2.1.	Next costume
2.2.	Play sound "C Elec Piano" until done
2.3.	Next costume
2.4.	Play sound "G Elec Piano" until done

Code the microphone track.

The microphone will play when the "m" key is pressed.
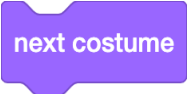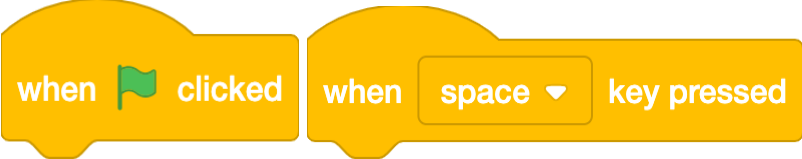You will use a condition-controlled iteration to to keep the microphone on the music staff.
Add the following code to the microphone sprite:
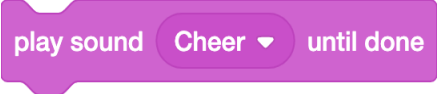
1.	When "m" key pressed
2.	Go To x: -130 y: 20
3.	Repeat until touching Singer1
3.1.	Next costume
3.2.	Move 100 steps
3.3.	Play sound "Singer2" until done

Ensure that the iteration ends correctly (**hint:** The repeat only ends when the microphone touches the singer. Is the singer in the right place?).

You will use the following blocks

Motion	move ( ) steps go to x: ( ) y: ( )
Looks	next costume
Sound	play sound Cheer ▼ until done
Events	when 🏳 clicked when space ▼ key pressed
Control	forever repeat ( ) repeat until ⬡
Sensing	touching mouse-pointer ▼ ? key space ▼ pressed?