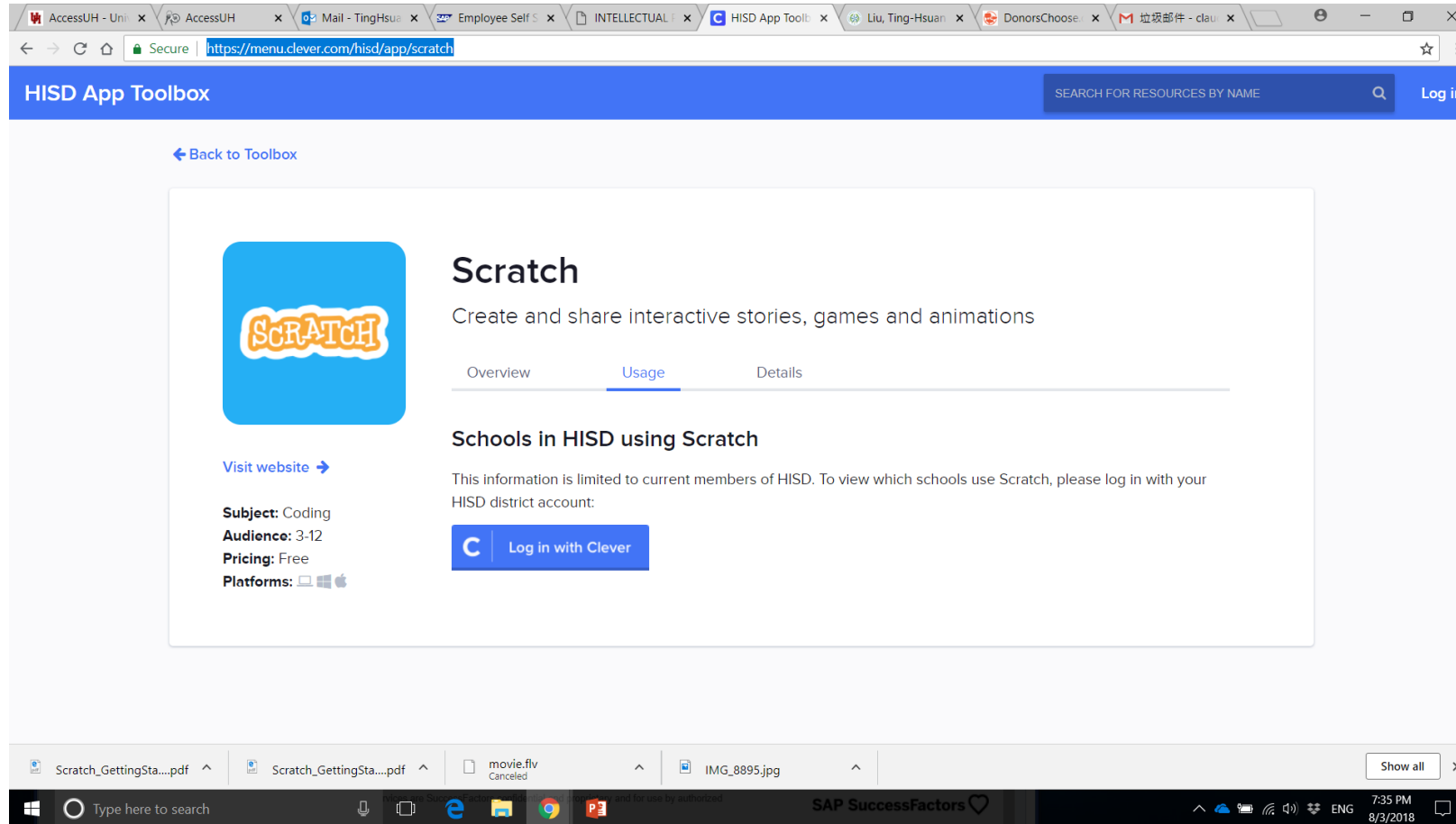


用SCRATCH做数学专案

How to use “SCRATCH” to make your math project?

- MIMS 5th grade
- Ms. T. Liu

第一步 First step



The screenshot shows a web browser window with the URL <https://menu.clever.com/hisd/app/scratch>. The page title is "HISD App Toolbox". The main content area features a card for the "Scratch" app. The card includes the Scratch logo, a description "Create and share interactive stories, games and animations", and tabs for "Overview", "Usage", and "Details". Below the tabs, there is a section titled "Schools in HISD using Scratch" with a note that the information is limited to current members and a "Log in with Clever" button. The card also lists the app's subject (Coding), audience (3-12), pricing (Free), and platforms (Windows, Mac, iOS).

Back to Toolbox

Scratch

Create and share interactive stories, games and animations

Overview Usage Details

Schools in HISD using Scratch

This information is limited to current members of HISD. To view which schools use Scratch, please log in with your HISD district account:

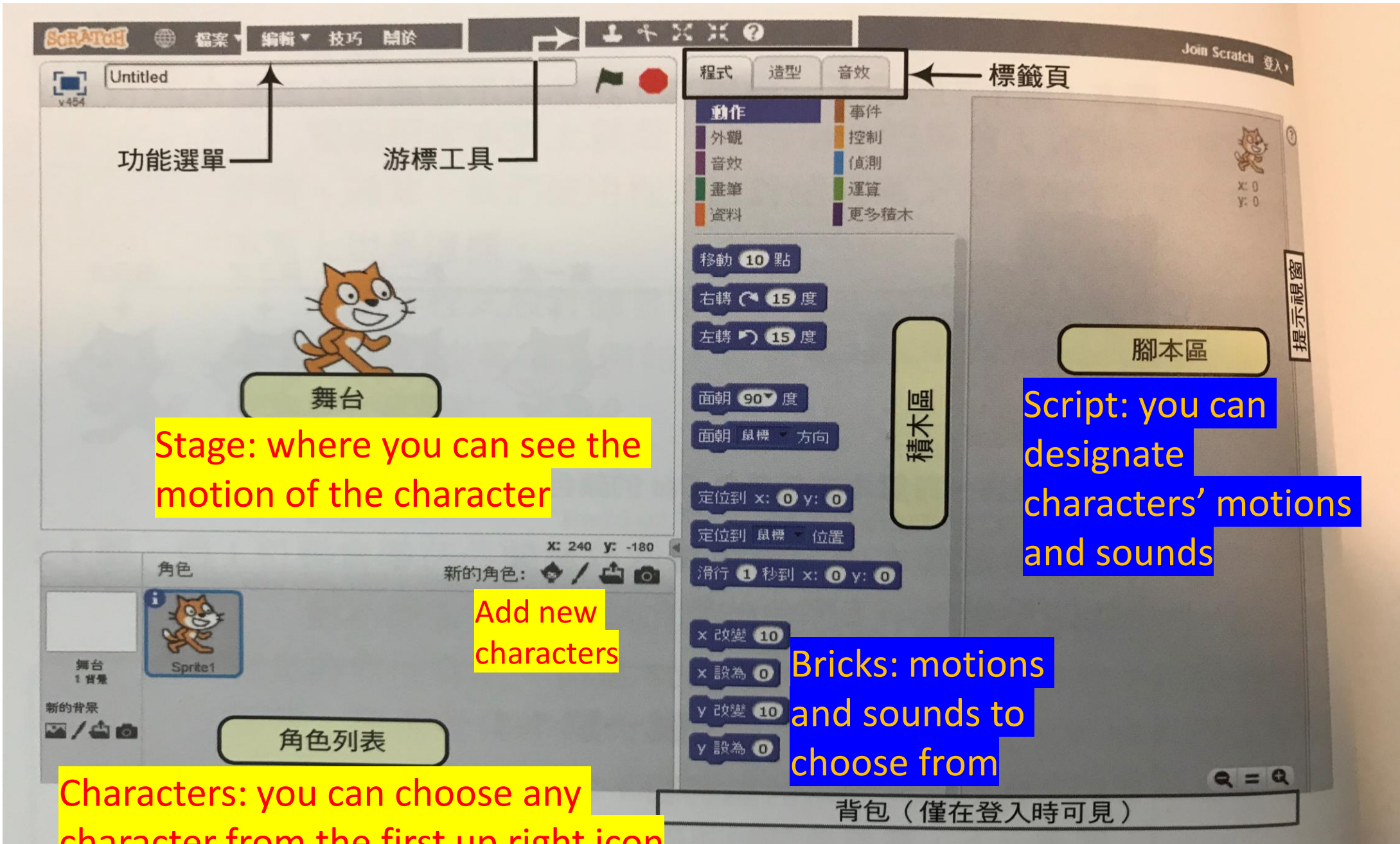
[Log in with Clever](#)

Subject: Coding
Audience: 3-12
Pricing: Free
Platforms: Windows, Mac, iOS

[Visit website](#)

Scratch_GettingSta...pdf Scratch_GettingSta...pdf movie.flv Canceled IMG_8895.jpg Show all

Type here to search SAP SuccessFactors 7:35 PM 8/3/2018



功能選單

游標工具

舞台

Stage: where you can see the motion of the character

Add new characters

角色列表

Characters: you can choose any character from the first up right icon

程式 造型 音效

標籤頁

- 動作
- 外觀
- 音效
- 畫筆
- 資料
- 事件
- 控制
- 偵測
- 運算
- 更多積木

- 移動 10 點
- 右轉 15 度
- 左轉 15 度
- 面朝 90 度
- 面朝 鼠標 方向
- 定位到 x: 0 y: 0
- 定位到 鼠標 位置
- 滑行 1 秒到 x: 0 y: 0
- x 改變 10
- x 設為 0
- y 改變 10
- y 設為 0

積木區

腳本區

Script: you can designate characters' motions and sounds

Bricks: motions and sounds to choose from

背包 (僅在登入時可見)

提示視窗

第二步 Second step

1. 为专案命名(name your project)
2. 经常储存专案(save your project constantly)
3. 选择脚色(choose your characters)
4. 写脚本时, 先到“事件”选择专案播放方式(The first thing you do is to go to **“Event”** to set up how you want to play your motion picture)
5. 选择动作和音效,把他们放在脚本区(choose motions and sounds from bricks and drag them to the script)
6. 经常播放脚本确定脚色的动作和音效(Please your motion picture constantly to see if the effects work.)

Scratch workspace area showing a blue arrow pointing to the text "专案名字" (Project Name) and "Name the project" in red. Below the text is the Scratch cat character.

Sprites panel area showing a blue arrow pointing to the text "增加新角色" (Add new characters) and "add new characters" in red. It includes a "New sprite" button and a list of sprites.

Scripts, Costumes, and Sounds panels. The Scripts panel is active, showing a sequence of code blocks: "move 10 steps", "turn 15 degrees" (left and right), "point in direction 90", "point towards mouse-pointer", "go to x: 0 y: 0", "go to mouse-pointer", "glide 1 secs to x: 0 y: 0", "change x by 10", "set x to 0", "change y by 10", "set y to 0", "if on edge, bounce", "set rotation style left-right", and "x position" / "y position" checkboxes.

选择播放方式

The screenshot shows the Scratch editor interface. The main stage area displays the Scratch cat sprite. The left sidebar contains the 'Sprites' panel with 'Sprite1' selected. The right sidebar shows the 'Scripts' palette with the 'Events' category selected. A blue arrow points from the 'when clicked' block in the palette to the 'when clicked' block in the script area. A red text overlay with a blue arrow pointing to the 'when clicked' block in the script area reads: '把这个图示拉过来脚本区' and 'Drag this icon to the script area'. The browser address bar shows 'https://scratch.mit.edu/projects/238172895/#editor' and the user name 'ClaudiaLiu7' is visible in the top right corner.

把这个图示拉过来脚本区
Drag this icon to the script area

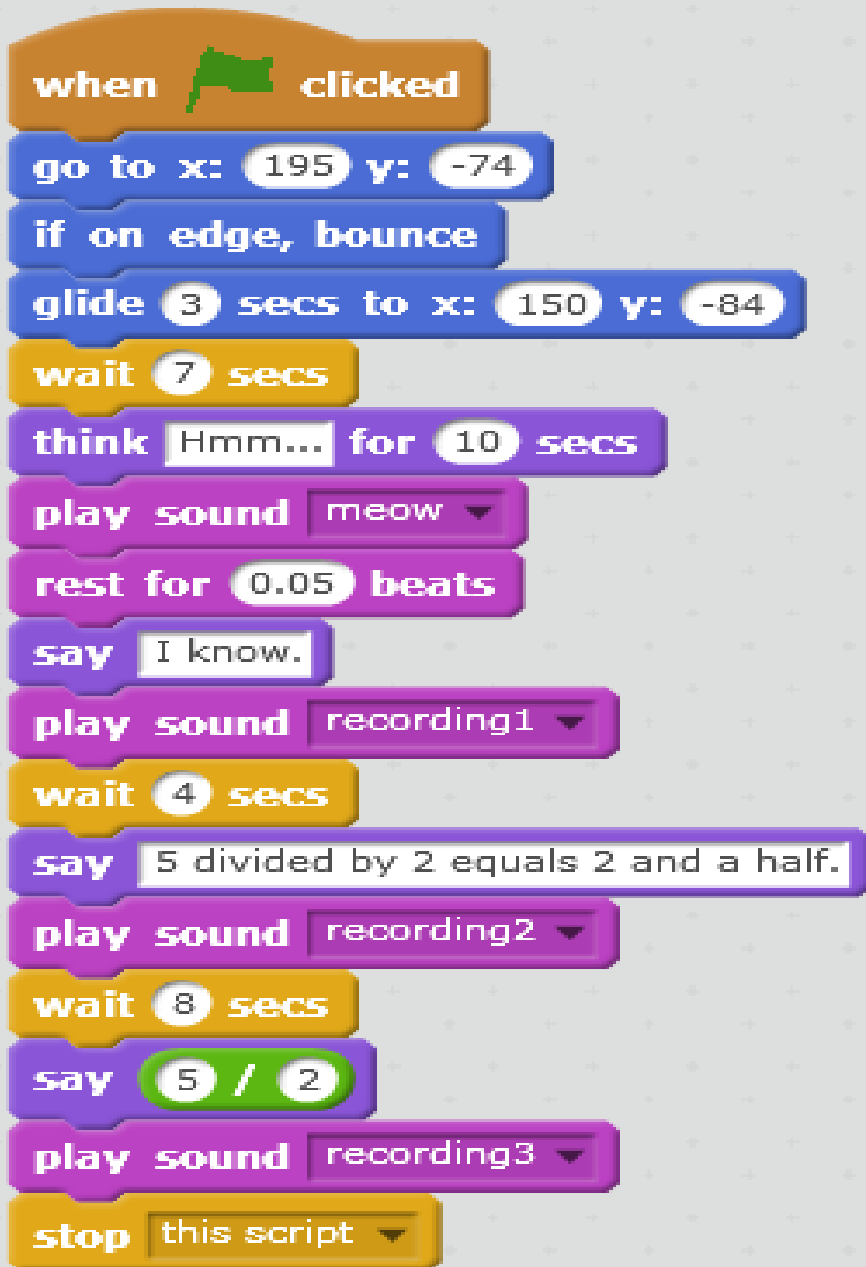
我的脚本---猫咪 the script for the cat

The screenshot displays the Scratch editor interface. The main stage shows a scene with a tall teal building, a woman character (Ms. Liu), a sun, and the Scratch cat character. The cat's current position is x: 150, y: -84. The 'Scripts' menu is open, showing a script for the cat character:

```
when green flag clicked
  go to x: 195 y: -74
  if on edge, bounce
  glide 3 secs to x: 150 y: -84
  wait 7 secs
  think Hmm... for 10 secs
  play sound meow
  rest for 0.05 beats
  say I know.
  play sound recording1
  wait 4 secs
  say 5 divided by 2 equals 2 and a half.
  play sound recording2
  wait 8 secs
  say 5 / 2
  play sound recording3
  stop this script
```

The 'Scripts' menu also shows other options like 'wait 1 secs', 'repeat 10', 'forever', 'if then', 'if then else', 'wait until', 'repeat until', and 'stop all'. The 'when I start as a clone' section includes 'create clone of myself' and 'delete this clone'.

The interface includes a browser address bar with the URL <https://scratch.mit.edu/projects/237982176/#editor>, a navigation bar with 'File', 'Edit', 'Tips', and 'About', and a 'See project page' button. The Windows taskbar at the bottom shows the time as 2:05 PM on 8/3/2018.



```
when green flag clicked
  go to x: 195 y: -74
  if on edge, bounce
  glide 3 secs to x: 150 y: -84
  wait 7 secs
  think Hmm... for 10 secs
  play sound meow
  rest for 0.05 beats
  say I know.
  play sound recording1
  wait 4 secs
  say 5 divided by 2 equals 2 and a half.
  play sound recording2
  wait 8 secs
  say 5 / 2
  play sound recording3
  stop this script
```

The image shows a Scratch script for a cat character. The script starts with a 'when green flag clicked' event block. It then moves the cat to coordinates (195, -74) and bounces off the edge. The cat glides to (150, -84) over 3 seconds, waits 7 seconds, and thinks 'Hmm...' for 10 seconds. It then plays a 'meow' sound, rests for 0.05 beats, and says 'I know.'. Next, it plays a recording named 'recording1', waits 4 seconds, and says '5 divided by 2 equals 2 and a half.'. It then plays another recording named 'recording2', waits 8 seconds, and says '5 / 2'. Finally, it plays a third recording named 'recording3' and stops the script.

我的脚本---猫咪
the script for the cat



Create

Explore

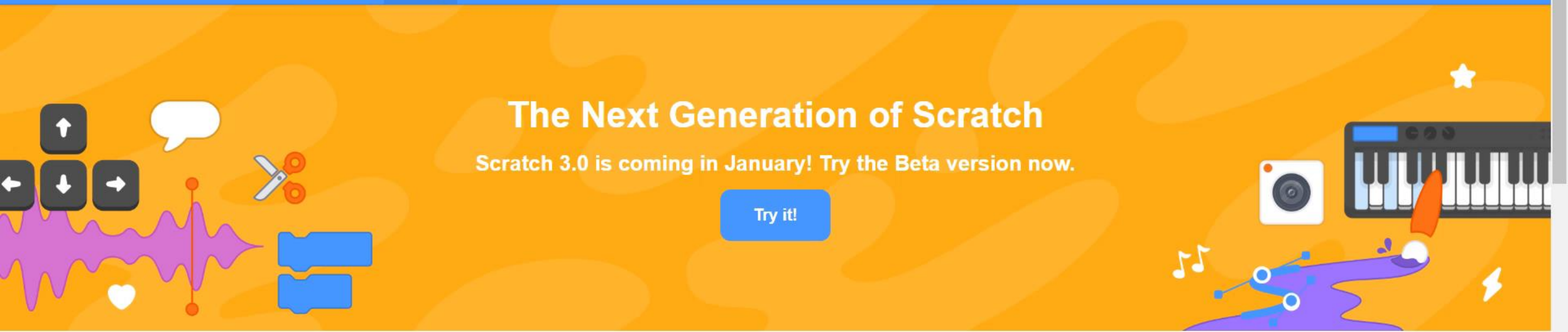
Tips

About

Search



ClaudiaLiu7



Try it!

Welcome to Scratch!

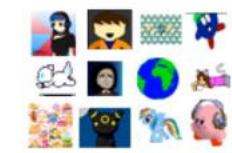
Learn how to make a project in Scratch



Try out starter projects



Connect with other Scratchers



Scratch News

View All



Scratch 3.0 Beta
Scratch 3.0 is coming in January! Click here to learn more and try the Beta version...



Scratch Camp: Music Week!
What's that sound in my ear? For this week's Scratch Camp, we're experimenting with sounds and music! ...



Wiki Wednesday
Check out the new Wiki Wednesday forum post, a news series highlighting the Scratch Wiki!

录新的音档(make new recording)

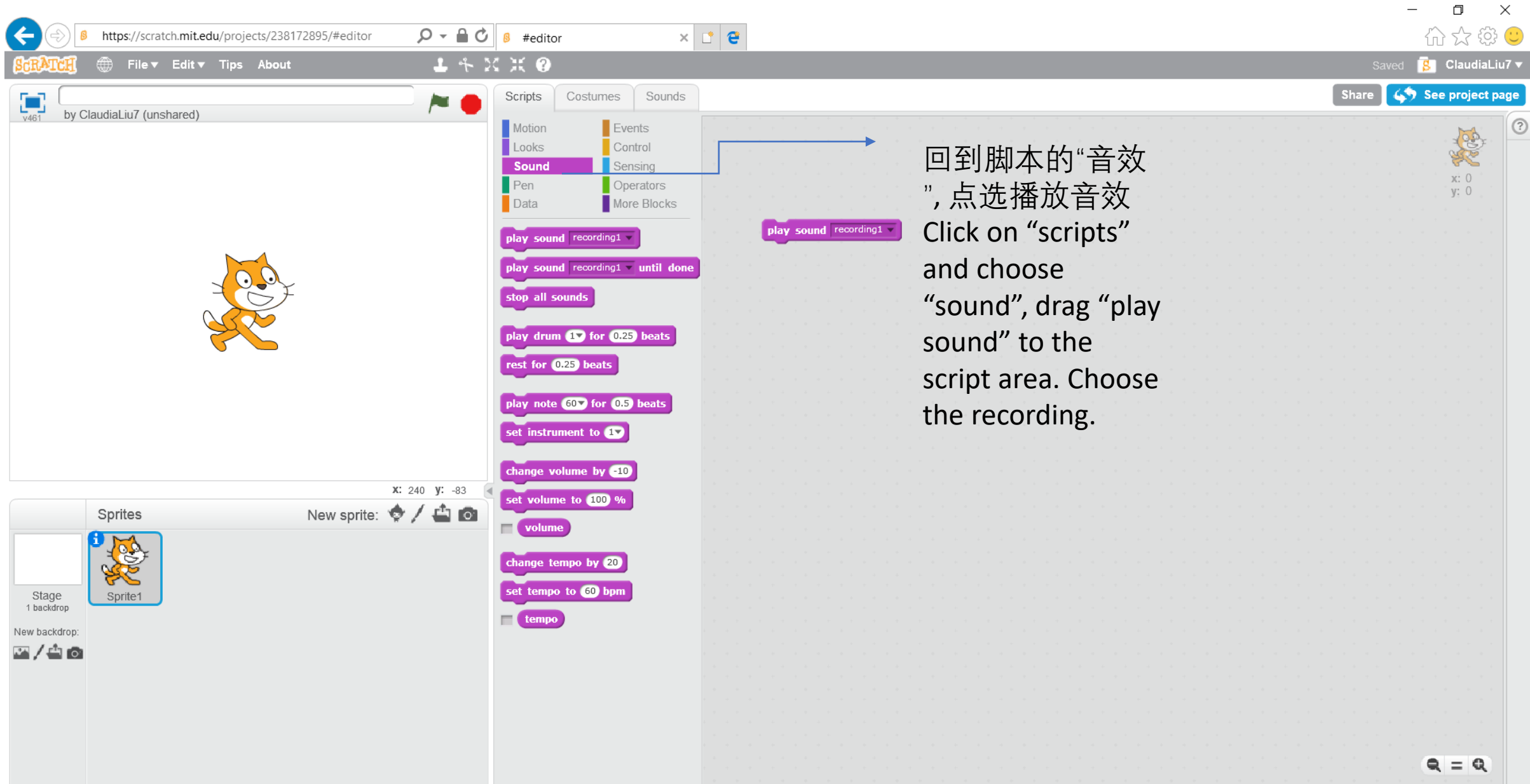
The screenshot shows the Scratch editor interface. The main stage area displays the Scratch cat sprite. The 'Sounds' panel on the right is open, showing a 'New sound' section with a microphone icon and a 'Record new sound' button. Below this, there are two existing sound clips: 'meow' and 'recording1'. A blue arrow points from the first red instruction to the microphone icon. A second blue arrow points from the second red instruction to the 'Record new sound' button. A third blue arrow points from the third red instruction to the 'Microphone volume' slider. The 'Microphone volume' slider is currently set to a low level. The 'Sprites' panel on the left shows 'Sprite1' selected. The bottom of the screen shows the Windows taskbar with the search bar and various application icons.

1. 点选这个麦克风 click on this microphone icon

2. 开始录音 start to record

3. 编辑录音 edit your recording

加入新的音档(play the new recording)



The screenshot shows the Scratch editor interface. The browser address bar displays <https://scratch.mit.edu/projects/238172895/#editor>. The Scratch logo and navigation menu (File, Edit, Tips, About) are visible at the top. The main workspace shows a Scratch cat sprite on a stage. The 'Scripts' block palette is open, and a 'play sound' block is being dragged from the palette to the script area. The 'play sound' block is currently set to 'recording1'. The 'Scripts' block palette includes categories like Motion, Looks, Sound, Pen, Data, Events, Control, Sensing, Operators, and More Blocks. The script area contains several blocks: 'play sound recording1', 'play sound recording1 until done', 'stop all sounds', 'play drum 1 for 0.25 beats', 'rest for 0.25 beats', 'play note 60 for 0.5 beats', 'set instrument to 1', 'change volume by -10', 'set volume to 100 %', 'volume', 'change tempo by 20', 'set tempo to 60 bpm', and 'tempo'. A blue arrow points from the 'play sound' block in the palette to the 'play sound' block in the script area. The 'Sprites' panel at the bottom left shows 'Sprite1' selected. The 'Stage' panel shows '1 backdrop'. The 'New backdrop' section has icons for image, video, and audio. The 'New sprite' section has icons for image, video, and audio. The 'Share' and 'See project page' buttons are visible in the top right corner. The Scratch cat logo and its coordinates (x: 0, y: 0) are in the bottom right corner.

回到脚本的“音效”，点选播放音效
Click on “scripts” and choose “sound”, drag “play sound” to the script area. Choose the recording.

My demo

Please use Adobe player to check on this video

<https://scratch.mit.edu/projects/237982176/#player>