

# Teddywaddy Code Club

## Activity 1d

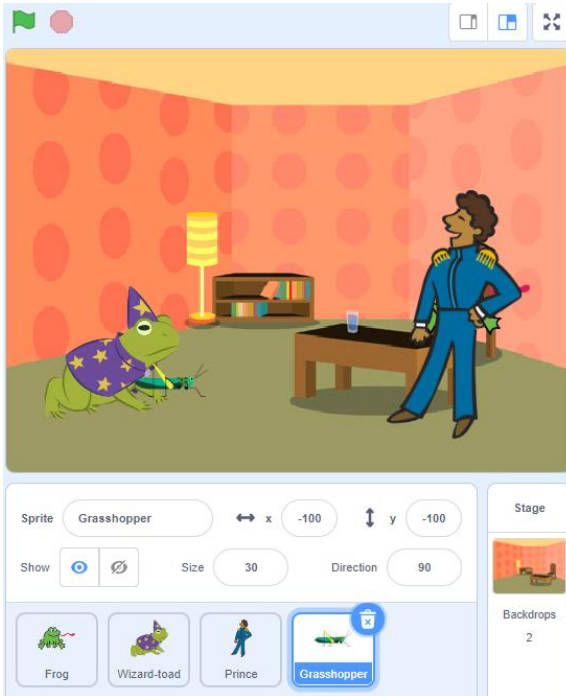
### Frog prince



<https://scratch.mit.edu/projects/587797172>

# Frog prince

First get everything arranged like below.



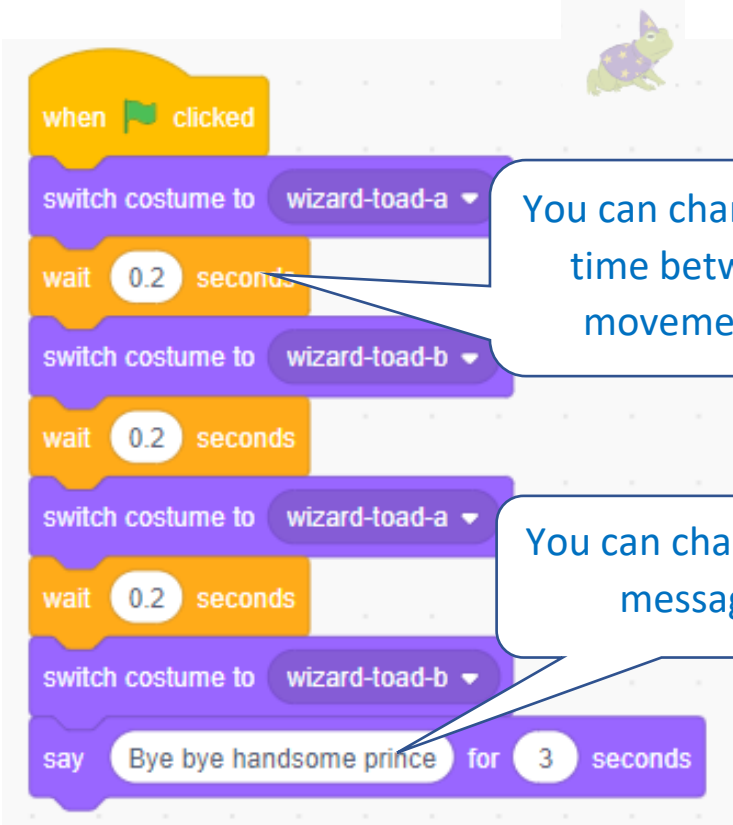
The frog is sitting on the chair behind the Prince and the Grasshopper is just in front of the Wizard toad.

Also make the Grasshopper smaller and the Prince bigger.

Grasshopper at x (-100) y (-100) & Size (30)  
Prince at x (-145) y (45) & Size (150)  
Frog at x (150) y (-30) & Size (100)  
Wizard toad at X (-150) y (-80) & Size (100)

## Add some code to the Wizard toad

Make sure the Wizard toad is selected.



The image shows a Scratch script for a Wizard toad. The script starts with a 'when green flag clicked' block. It then follows a sequence of 'switch costume to' blocks, 'wait' blocks, and a 'say' block. The costumes are 'wizard-toad-a' and 'wizard-toad-b'. The wait blocks are set to 0.2 seconds. The 'say' block is set to 'Bye bye handsome prince' for 3 seconds. A small image of a Wizard toad is shown in the top right corner of the script area.

```
when green flag clicked
  switch costume to wizard-toad-a
  wait 0.2 seconds
  switch costume to wizard-toad-b
  wait 0.2 seconds
  switch costume to wizard-toad-a
  wait 0.2 seconds
  switch costume to wizard-toad-b
  say Bye bye handsome prince for 3 seconds
```


You can change the time between movements.

You can change the message

The code should make the Wizard toad look like it is throwing something.

## Add some code to the Prince.

Make sure the Prince is selected.



The image shows a Scratch script for a Prince character. The script starts with a 'when green flag clicked' block, followed by a 'show' block. Then, there is a 'wait until touching Grasshopper?' block. This is followed by a sequence of 'change pixelate effect by' blocks with values 50, 100, and 200, each preceded by a 'wait 0.3 seconds' block. The script ends with a 'hide' block. A small image of a Prince character is shown in the top right corner of the workspace.

You can change the time between the pixelate changes

You can add more pixelate and wait blocks to change the effect.

## Add some code to the Grasshopper

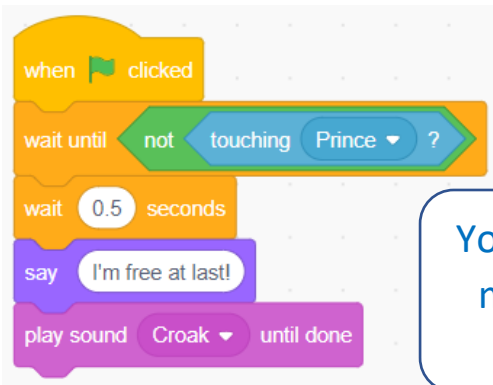


```
when green flag clicked
  show
  go to x: -100 y: -100
  wait 0.6 seconds
  glide 1 secs to Prince
  hide
```

The code block for the Grasshopper consists of five blocks: a yellow 'when green flag clicked' block, a purple 'show' block, a blue 'go to x: -100 y: -100' block, an orange 'wait 0.6 seconds' block, a blue 'glide 1 secs to Prince' block, and a purple 'hide' block.



## Add some code to the Frog



```
when green flag clicked
  wait until not touching Prince
  wait 0.5 seconds
  say 'I'm free at last!'
  play sound Croak until done
```

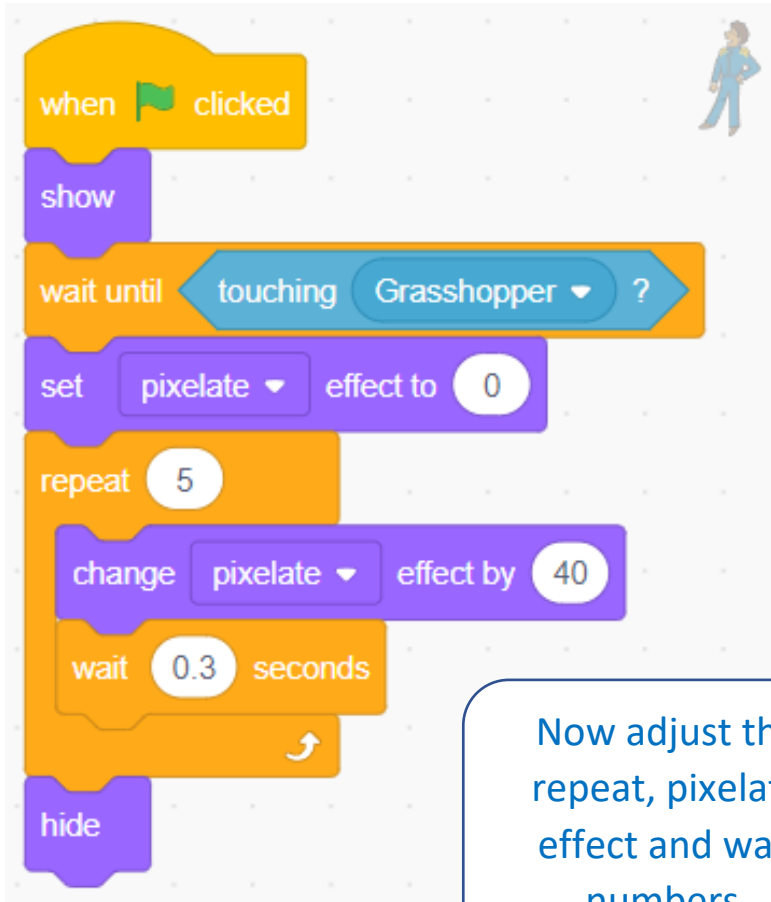
The code block for the Frog consists of five blocks: a yellow 'when green flag clicked' block, an orange 'wait until not touching Prince' block, an orange 'wait 0.5 seconds' block, a purple 'say 'I'm free at last!'' block, and a purple 'play sound Croak until done' block.



You can change the message and the sound

## Extensions – Some more difficult things to try

1. Change the way the Prince disappears.

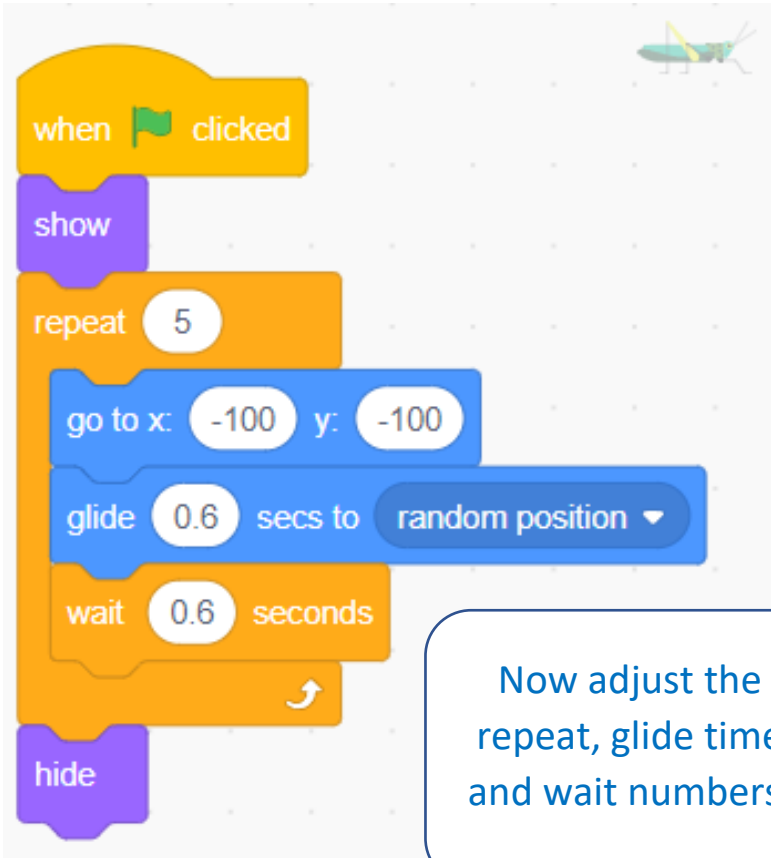


The image shows a Scratch script on a stage with a Prince sprite. The script consists of the following blocks:

- when green flag clicked
- show
- wait until touching Grasshopper ?
- set pixelate effect to 0
- repeat 5
  - change pixelate effect by 40
  - wait 0.3 seconds
- hide

A callout box on the right contains the text: "Now adjust the repeat, pixelate effect and wait numbers."

## 2. Throw more Grasshoppers.



The image shows a Scratch script on a grid background. In the top right corner, there is a small green grasshopper icon. The script consists of the following blocks:

- when green flag clicked** (yellow)
- show** (purple)
- repeat 5** (orange) loop containing:
  - go to x: -100 y: -100** (blue)
  - glide 0.6 secs to random position** (blue)
  - wait 0.6 seconds** (orange)
- hide** (purple)

A callout box on the right side of the script contains the text: "Now adjust the repeat, glide time and wait numbers."

3. Make the frog appear from pixels.



3. Instead of pixels you could make the Frog jump up and down when it becomes free.