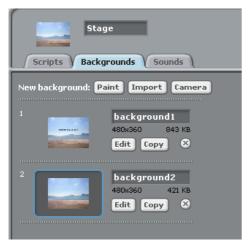
FRUIT BASKET GAME

Step 1: Do staging

Go to the **staging** section.

- 1. Click on the **edit** button on background 1, click import and go to the folder you just saved onto your memory stick.
- 2. Click on the **boardwalk.BMP** file.
- 3. Click **import** next to the new background and go into the **outdoors** file of scratch and select **board walk.**

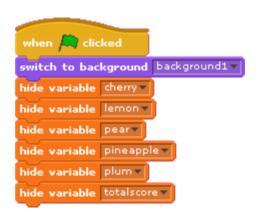
It should look like this:



Step 2: Make variables

Switch to the **scripts** tab on the stage.

- 1. Go to the variables tab and click make a variable, and call one totalScore, and the others cherry, lemon, pear, plum and pineapple.
- 2. Go to control section and put a "when flag is clicked" piece on.
- **3.** Then go to the **looks** section and get a "**switch to background**" piece and choose **background1**.
- **4.** Now go to the **variables** and select "**hide variable**", place 6 of these on it, change each to **totalScore**, **cherry**, **pear**, **plum**, **pineapple** and **lemon**.



5. Then get the "set to 0" and place 6 of these, the same. Then set them all to 0.

```
set cherry to 0

set lemon to 0

set pear to 0

set pineapple to 0

set plum to 0

set totalscore to 0
```

- **6.** Then get a wait until piece from the control section.
- 7. Go to sensing and select "key pressed" piece, set this to space and place it in to the wait until piece.
- 8. Then go to looks and get the "next background" piece.
- **9.** Then to sensing and select "reset timer".
- 10. Then to control and select "broadcast and wait", set it to new, and call it start.

```
next background
reset timer
broadcast start and wait
```

The picture below is what it should look like:

```
when 🦱 clicked
switch to background background1
hide variable cherry
hide variable lemon▼
hide variable pear▼
hide variable pineapple -
hide variable plum ▼
hide variable totalscore
set cherry ▼ to 0
set lemon▼ to 0
set pear▼ to 0
set pineapple▼ to 0
set plum ▼ to 0
set totalscore ▼ to 0
wait until (key space ▼ pressed?
next background
reset timer
broadcast start▼ and wait
```

Step 3: Control the basket

- 1. Click on paint new sprite, go to costumes, click import, select the basket picture from the folder on your memory stick. You might have to shrink or enlarge the picture so that it fits on the screen (top left of editing screen).
- 2. Go to the **control** section and select a "**when I receive**_" piece, change it to **start**.
- 3. Go to **looks** and get a "**show**" block.
- 4. Go into **motion**, get a "**set y to 0**" piece, change the value to **-80**.



- 5. Go back to control to get a "repeat until".
- 6. Go to the **operators** tab and select a "_>_" and place it into the **repeat until** loop.
- 7. Then go to **sensing** and place a **timer** piece on the left hand side of the operator, and set the right hand side to 60, so that it says **timer** > 60.

```
repeat until timer > 60
```

- 8. Then go into **control** and get 2 "**if**" pieces.
- 9. Go to the **sensing** and get 2 "**key pressed?**" pieces and place one into each of the "**if**" pieces.
- 10. Set the first one to say if the **right arrow** is pressed. In this first one, if the right arrow is pressed, go to **motion** and get a "**change x by**", and place it on the script, set the value to to 8.
- 11. Set the second one to if the **left arrow** is pressed. Do the same for as in above but set this value to **-8**.

```
if key right arrow pressed?

change x by 8

if key left arrow pressed?

change x by -8
```

12. Place both of these if pieces inside the **repeat until** piece.

- 13. After the **repeat until** piece, go to **looks** and select a "**hide**" piece.
- 14. Then go to **control** and get a "**broadcast**" piece, and set it **new**, and call it **end**.

```
hide
broadcast end▼
```

This is what it should look like:

```
when I receive start v
show
set y to -80
repeat until timer > 60

if key right arrow v pressed?

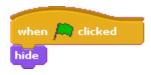
change x by 8

if key left arrow v pressed?

change x by -8

hide
broadcast end v
```

15. Go to **control** and get a "**when flag is clicked**" piece, under this place a "**hide**" from **looks**. This should be separate from the script you just finished.



Step 4: Program the falling fruits

- 1. First make a new sprite, go to costumes, edit, and then import.
- 2. Get the picture of the cherry from the folder and also name the sprite "**cherry**". You might have to shrink or enlarge the picture so that it fits on the screen (top left of editing screen).
- 3. Then go to **control** and select the "**when I receive**_" piece, and change it to "**start**". In the **variables** section select "**show**" variable, and change it to "**cherry**".
- 4. Go to **looks** and select a "**show**" piece and put this on as well.

```
when I receive start show variable cherry show
```

- 5. Then in **control** get a "**repeat until**" piece.
- 6. Go to **operators** and get a " > " piece.
- 7. Then go to the **sensing** and select "**timer**", put this on the left hand side of the operator
- 8. Set the right hand side to **60**.
- 9. Place this piece into the "repeat until" piece.

```
repeat until (timer > 60)
```

- 10. Inside the "repeat until" piece get a "set y to_" piece from motion, and set it to 230. Then get a "set x to_" piece, and place this under the "set y_" block.
- 11. Go to **operators** and place a "**pick random**" piece into the "**set x to_**" piece, then change the first value to "**-240**" and the second to "**240**".

- 12. Under this piece and still inside the "repeat until" piece, get another "repeat until" piece from the control tab.
- 13. Into this **repeat until** piece, get "_or_" piece from **operators** and place it into it.
- 14. In the left hand side option, go to **sensing** and get a "**touching_?**" piece. Place this into the left hand side and then set the option to be basket.

```
touching basket ? or
```

- 15. On the right-hand side of the "_or_" piece, place another "_or_" piece from operators.
- 16. Into the left-hand side of this piece, get a "_<_" piece from **operators** and get a "_>_" piece for the right-hand side.
- 17. In the "_<_" piece for the left, get a "y position" piece from motion, for the right side set it to -170. For the "_>_" piece, go to sensing and get a "timer"

piece and place it on the left, and on the right set it to 60.

```
y position < -170 or (timer > 60
```

18. All of this goes into the "repeat until" slot.

```
repeat until touching basket ? or y position < -170 or timer > 60
```

- 19. Inside this "repeat until" piece, go to motion and get a "change y by_" piece, place it and set the value to -2.
- 20. Then get a "**turn degrees**" piece from **motion** like the one in the picture after this. Set it to 10 degrees.

```
repeat until touching basket ? or y position < -170 or timer > 60

change y by -2

turn ( 10 degrees
```

- 21. After this, get an "if" piece from control.
- 22. Into this, go to **sensing** and select a "**touching_?**" piece. Place this and then set it to touching **basket** as before.
- 23. Inside this "**if**" piece, go to **variables** and select a "**change** _ **by** _" piece, and put this on, select the first option as **cherry** and the second option as 1.

```
repeat until touching basket ? or y position < -170 or timer > 60

change y by -2
turn + 10 degrees
if touching basket ?
change cherry by 1
```

24. After all of this, outside of the "repeat until" pieces, place a "hide" from looks.

```
when I receive start show variable cherry show repeat until timer > 60

set y to 230

set x to pick random -240 to 240

repeat until touching basket or y position < -170 or timer > 60

change y by -2

turn  10 degrees

if touching basket change cherry by 1
```

25. Go to **control** and get a "**when flag is clicked**" piece, under this place a "**hide**" from **looks**. (Make sure you do this on every fruit!)

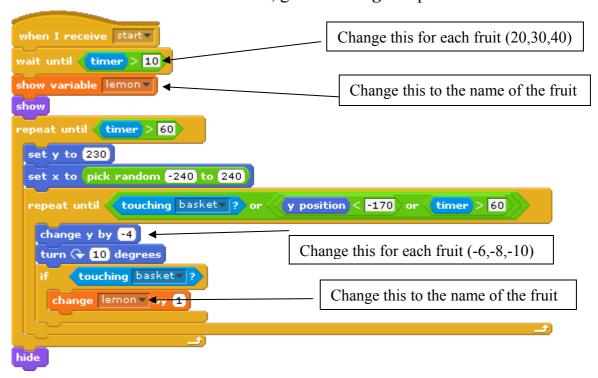


- 26. Now you have to make 4 more sprites called **lemon**, **pear**, **plum** and **pineapple**.
- 27. Edit the costume, for each of these sprites it should be set to their picture in the folder.
- 28. The scripts for each of these is almost the same as **cherry**, so to speed up your time, right-click on script you've made in **cherry**, select duplicate, and then drag the copy into **lemon**.



- 29. The script for **lemon** is almost the same as **cherry**'s. **Lemon** appears only after 10 seconds into the game, so we insert a **wait until (timer > 10)** block to ensure this.
- 30. Place the "wait until_" from control after the "when I receive start" piece at the top of each script.

31. Then place a "_>_" from the **operator** section, and set the right-hand side to 10 and for the left-hand side, go to **sensing** and place a "**timer**" block.



- 32. All the fruits **pear**, **plum** and **pineapple** have the same script as the **lemon**. They are different in terms of:
- variable to appear (**show variable** block)
- time to appear (wait until_block)
- falling speed (change y by_ block)
- the variable to update (**change_by_** block)

So for **lemon** set time to 10 and falling speed to -4. For **pear** set time to 20 and falling speed to -6. For **plum** set time to 30 and falling speed to -8. For **pineapple** set time to 40 and falling speed to -10.

Step 5: Display final score

- 1. Create a new sprite called Score. Its first costume will have the "**Time's Up**" picture that is in the Fruit Basket folder, name this costume **score1**.
- 2. Then make a new costume which has the "Your Score Is" picture.
- 3. Now go back to the script, and in the **control** section, get a "**when I receive**" block, and set this to "**end**".
- 4. Go to **looks** and get a "**switch to costume**", and set it to **score1**, which should be the name of your first costume.
- 5. The get a "show" piece from looks as well.

```
when I receive end v
switch to costume score1 v
show
```

- 6. Then go to controls and get a "wait secs" block and place this and set it to 2.
- 7. Go back to looks and get a "next costume" piece.
- 8. After this go to **variables** and get a "**show variable**_" piece and place this and set it to "**totalScore**".

```
when I receive end v

switch to costume score1 v

show

wait 2 secs

next costume

show variable totalscore v
```

- 9. Then go into **control** and get a "**repeat until**_" block.
- 10. Inside the gap, place a "_=_" piece from **operators**.
- 11. In the left hand side of this operator, place a **cherry** from **variables**, set the right hand side to 0.
- 12. Inside this "repeat until_" piece, get 2 "change_by_" pieces from variables and put them in.
- 13. Set the first one to "totalScore" and have it change by 1,
- 14. Set the second one to **cherry**, and change it by -1.
- 15. After all of this, place a "wait_secs" block from control and set it to 0.5.

```
when I receive end v

switch to costume score1 v

show

wait 2 secs

next costume

show variable totalscore v

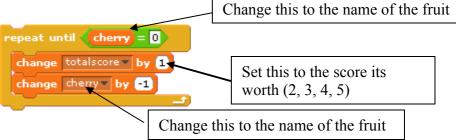
repeat until cherry = 0

change totalscore v by 1

change cherry v by -1

wait 0.5 secs
```

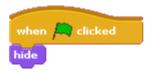
16. The rest of the fruits are the same, so right click and duplicate this "**repeat until**_" block of pieces. Make 4 duplicates, one for each of the other fruits. For each of them, change the left-hand side of the operator to the variable of each of the fruits.



- 17. Then change the amount by which **totalScore** is changing, depending on how much you want each fruit to be worth, lemon =2, pear =3, pineapple = 4, plum =5.
- 18. Then change the 2nd variable to be the same fruit This is what it should look like:

```
when I receive end
switch to costume score1
wait 2 secs
next costume
show variable totalscore
repeat until (che<del>rry</del> = 0
 change totalscore by 1
 change cherry v by -1
wait (0.5) secs
repeat until (lemon = 0)
 change totalscore ▼ by 2
 change lemon ▼ by (-1)
wait (0.5) secs
repeat until (pear) = 0
 change totalscore ▼ by (3)
 change pear▼ by -1
wait 0.5 secs
repeat until 🏈 pineapple 😑 🕕
change totalscore by 4
 change pineapple by -1
wait 0.5 secs
repeat until (plum) = 0
 change totalscore ▼ by (5)
 change plum ▼ by -1
wait 0.5 secs
```

19. Go to **control** and get a "**when flag is clicked**" piece, under this place a "**hide**" from **looks**.



20. Now play the game, and after you've played through once, go to the totalscore variable on the game screen, right-click and select **large readout** then place it to the right of the words on the screen so that it looks a bit like this:



Now your game should work! Click the green flag and then space and play away!

If you want to mess around with the game, you can change the falling speeds, the time they appear or how many points they are worth. Go to Step 3: 32 and Step 4: 16.