# Lesson 8 — alternative to quiz

Lesson 8 is offered as a quiz. We also provide an extension activity in the form of a brief for a portfolio piece. The students will have to work on <https://pytch.org/> directly for the below:

**Write a game where apples and oranges randomly appear, move across the screen, then disappear. The player** **has to click on the apple or orange before it disappears. If the player manages, they get 10 points, and that fruit disappears straight away. Each time** **a fruit appears, that fruit should have a speech bubble saying the player’s current score.**

**Hints:**

* **Use the “choose from library” feature to get apple and orange costumes.**
* **Use the “when this sprite clicked” hat block to tell Pytch to run a piece of code when the player clicks on the sprite.**
* **Have one sprite with two costumes.**
* **Give your sprite two scripts — one to do the “appear, glide, disappear” sequence again and again; and one to react when the sprite is clicked.**
* **For each movement across the screen, you'll need to choose four random numbers: the x and y values for the starting point, and the x and y values for the ending point. You can use random.randint() for generating the random numbers.**
* **Use a variable “self.score”. Think about when to set its starting value, and when and how to change it.**

Possible solution:

In a “when green flag clicked” script:

self**.**score **=** 0  
**while** True**:**  
 start\_x **=** random**.**randint**(-**220**,** 220**)**  
 start\_y **=** random**.**randint**(-**160**,** 160**)**  
 costume\_idx **=** random**.**randint**(**0**,** 1**)**  
 self**.**go\_to\_xy**(**start\_x**,** start\_y**)**  
 self**.**switch\_costume**(**costume\_idx**)**  
 self**.**say**(**self**.**score**)**  
 self**.**show**()**  
 end\_x **=** random**.**randint**(-**220**,** 220**)**  
 end\_y **=** random**.**randint**(-**160**,** 160**)**  
 self**.**glide\_to\_xy**(**end\_x**,** end\_y**,** 1.0**)**  
 self**.**hide**()**  
 self**.**wait\_seconds**(**2.0**)**

In a “when this sprite clicked” script:

self**.**score **=** self**.**score **+** 10  
self**.**hide**()**

*There is more than one way to interpret the brief. The student’s solution needn’t be exactly like this.*