Intermediate Game Production
using Scratch 1.4
Bonus Points

By the end of each task I should know how to...
Task 1 - make sprites appear and disappear
Task 2 - make sprites disappear to random times
Task 3 - make sprites appear randomly in different places on the stage.

Bonus Points

So far, all the sprites in our game can be seen for the whole time the game is being played.

It is common, in games, for sprites to appear on the screen for short spaces of time and then disappear. These sprites could be things like power-ups or items that characters can pick up.

Extra Speed

Firing Increase

Double Points

To make sprites appear and disappear in Scratch we use the `show` and `hide` blocks.

Here is example of hiding and showing a sprite.

```
when [green flag] clicked
forever
  hide
  wait 10 secs
  show
  wait 2 secs
```
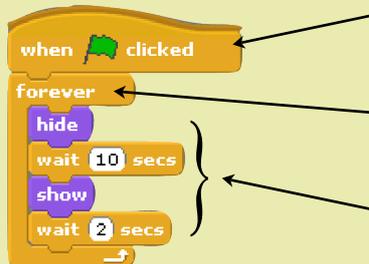
The script starts when the green Go flag is clicked.

The *forever* loop repeats the blocks inside it until the game is stopped.

The sprite starts by being hidden, waits 10 seconds, is shown, waits 2 seconds and then disappears when the loop starts again.

To make the sprite appear randomly the *pick random* block could be used to pick a number between 1 and 10.

`wait pick random 1 to 10 secs`

You should attempt **all** of the tasks below **in order**. Remember - these tasks are designed to make you solve problems yourself. Do not look at the solutions unless you absolutely have to!

Task 1 - Use the show, hide and random blocks to make a 'bowl of Cheesy Puffs' sprite appear, on the stage, randomly every 1 to 10 seconds. If the shark catches the cheesy puffs in time the player gets a 50 point bonus.

Task 2 - Use the random block to make the cheesy puffs disappear at random times.

Task 3 - Use a combination of the `go to x: 0 y: 0` and `pick random 1 to 10` blocks to make the cheesy puffs change where they appear on the stage.
Note - you will have to think of minimum and maximum x and y numbers.

Bonus Points

Bonus Points (solutions)

Task 1

Add the cheesy puffs sprite to the game (you'll find it in the 'Things' folder).

Now create the script for the cheesy puffs shown below.

Add the *pick random* block to make the cheesy puffs appear at random times.

Finally, add an IF block to the shark to add 50 points on to the score if the shark is touching the cheesy puffs.

Task 2

This is an easy one! Simply add another *pick random* block to the second wait block.

Task 3

To make the cheesy puffs appear in random places on the stage we need to look the stage's coordinates.

Remember the stage ranges from
x = -240 up to 240   and
y = -180 up to 180
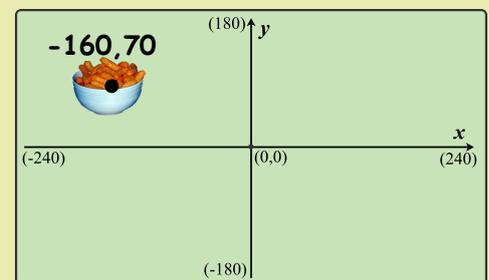
We can use this in our cheesy puff script.
Add a *go to x,y* block with random numbers for x and y.

Note that the x and y numbers do not go right to the edge of the stage or some of the cheesy puff sprite would disappear off the edge of the stage.