BARCLAYS

Scratch Tools

Quick reference guide

Barclays Digital Eagles

Code Playground powered by CoderDojo

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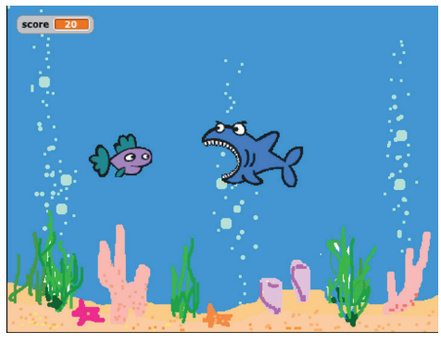
Basic Beginners Scratch



Name: _____

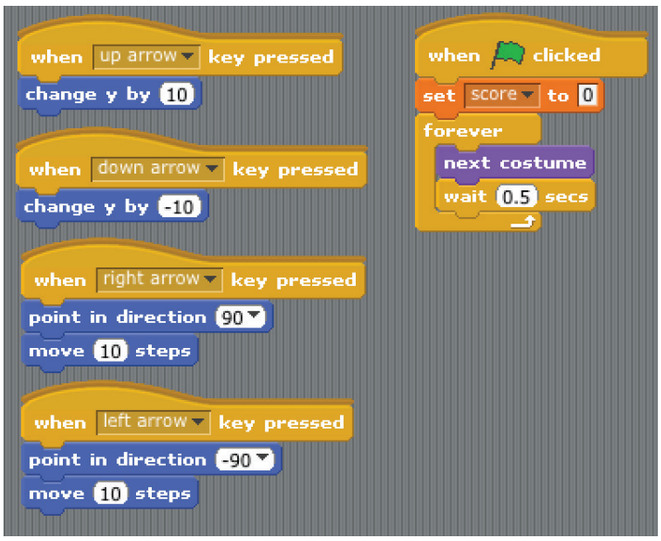
Date: _____

Sensai: _____

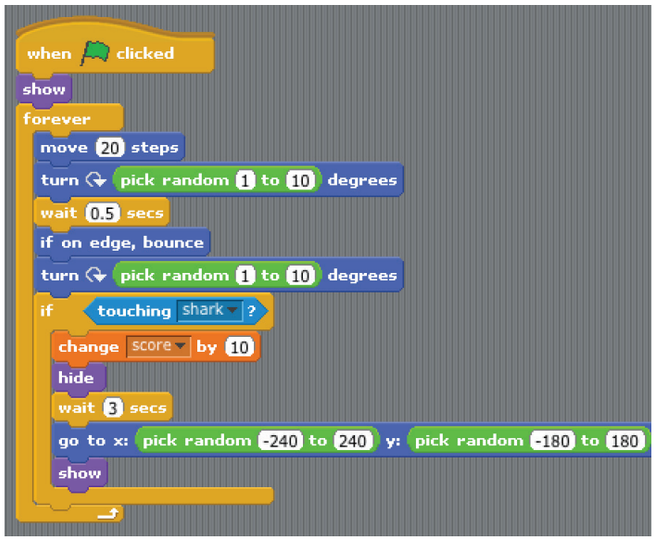
The Shark Game 1.0 - Level 1 ICHI.

Learn the basics of sprites, scenes, and scripts. Animate and control the shark to eat the fish until you reach the maximum score!

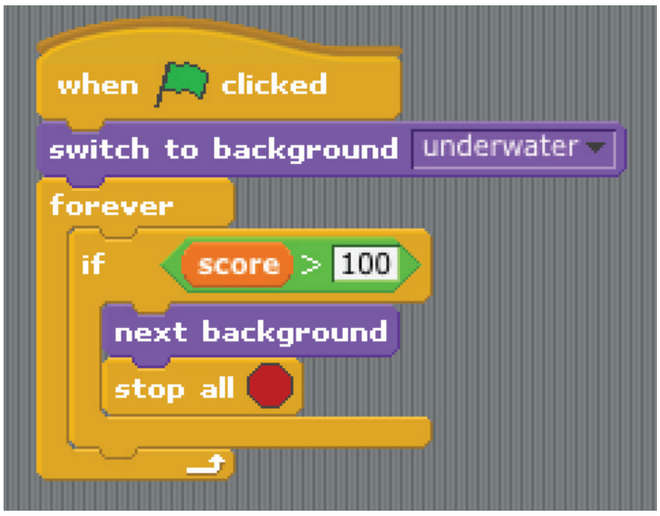
Script for Shark



Script for Fish



Script for Stage



Now try this...

- Can you make the fish move faster & appear quicker?
- Can you make the game stop when the score is exactly 100?
- Can you draw and use your own fish?
- How would you make the game better?

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Basic Beginners Scratch

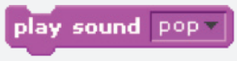
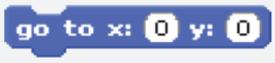
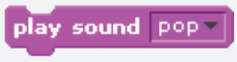
Name: _____

Date: _____

Sensai: _____

The Shark Game 2.0 - Level 1 NI.

Use your previous shark game and try adding these extras. Make the game more fun, a bit harder, learn more commands, and take it up to version 2.0.

	Targets	Hints	Done
Level up!	Make another fish for the shark to eat by duplicating your fish sprite	There's a 'duplicate' button on the sprite toolbar or you can right-click on your sprite	
	Add a different colour 'bad fish' which reduces your score by 10 if you eat it	Duplicate sprite, change costume, negative score	
	Introduce a 'GAME OVER' message when the game finishes and hide the fish	Create a 'GAME OVER' sprite,	
	Add a popping sound when eating a good fish		
Level up!	Ask the player to enter their name at the start of the game and display it on screen	'Ask and wait', use 'broadcast' when the game has started to start the sprites moving	
	Create some backgrounds so that the bubbles appear to rise	Copy and edit backgrounds	
	Add a crab which walks across the sea bed		
	Add a gong sound when eating a bad fish		
	Control the shark with the mouse rather than the cursor keys		
Level up!	Change from using a maximum score to using a countdown timer to end the game	Use a variable called 'time', set to 30, wait 1 second, change by -1	
	Make the shark only chomp down when eating a fish	Have the fish 'broadcast' when they have been eaten and make the shark respond	
	Add a bubbles sound to play in the background all of the time until 'game over'	Forever, play sound until done	
Level up!	Make another 'bad' fish and make it chase the shark	Duplicate sprite, what did you use to make the shark follow the mouse?	
	Add an instructions screen at the start of the game	Add background until player enters their name	
	Make the crab do something interesting …	Use your imagination and make something great!	

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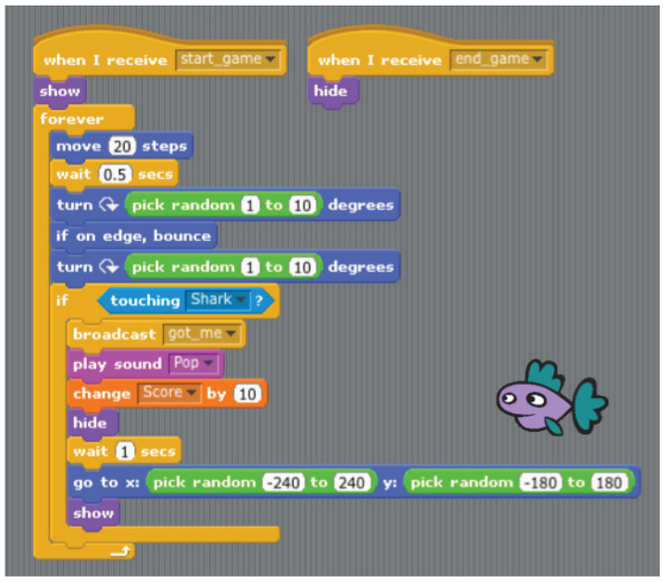
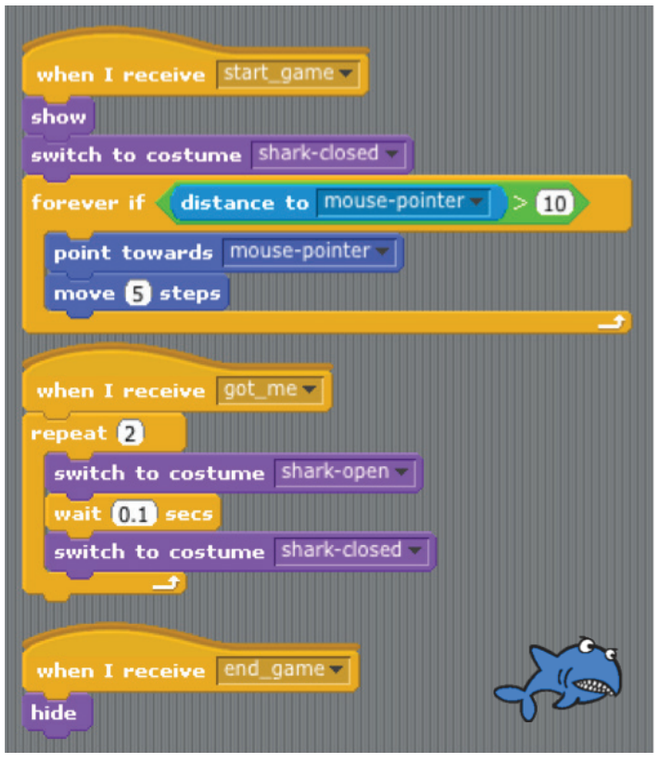
Basic Beginners Scratch

The Shark Game 2.0 - Cheat Sheet.

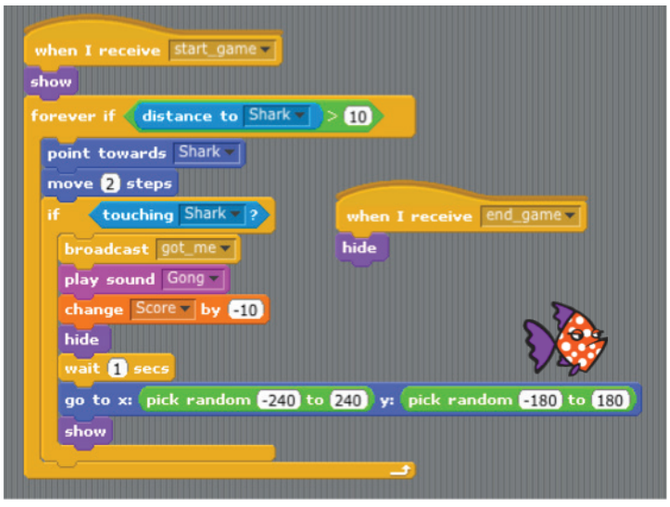
Script for 'good' fish



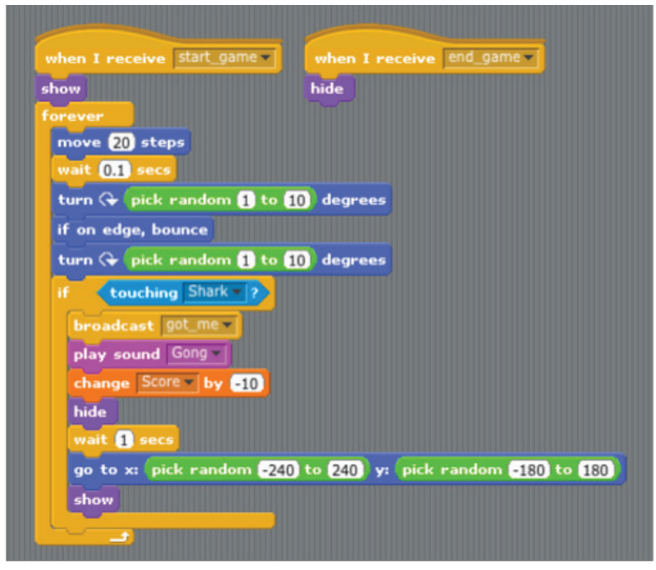
Script for 'shark'



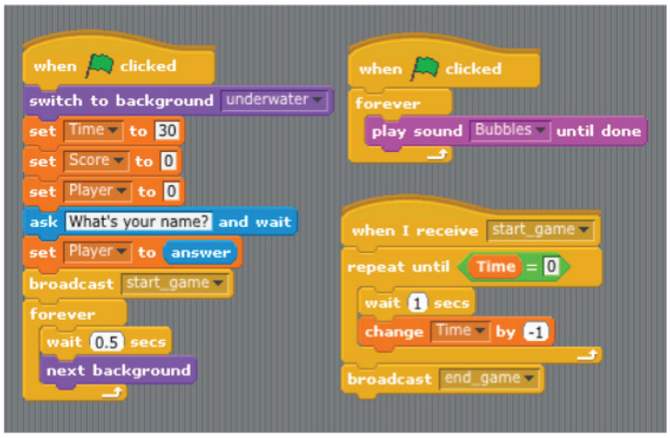
Script for 'bad' fish - chasing



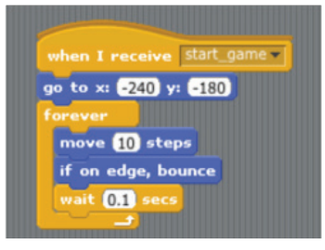
Script for 'bad' fish - random



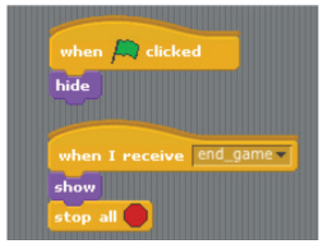
Script for scene



Script for crab



Script for Game Over



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Beginners Scratch

Name: _____

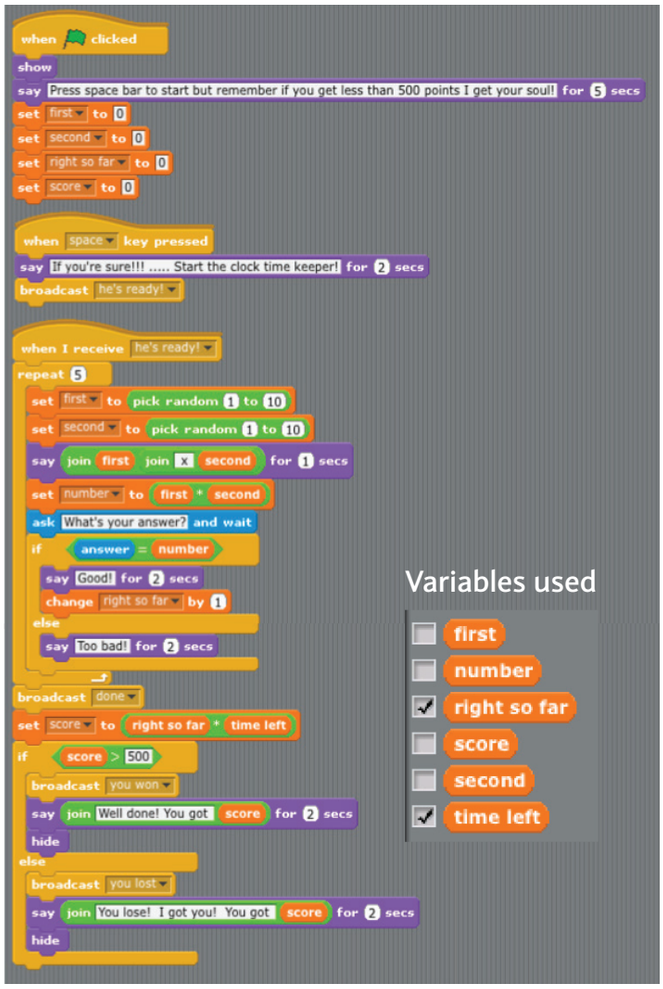
Date: _____

Sensai: _____

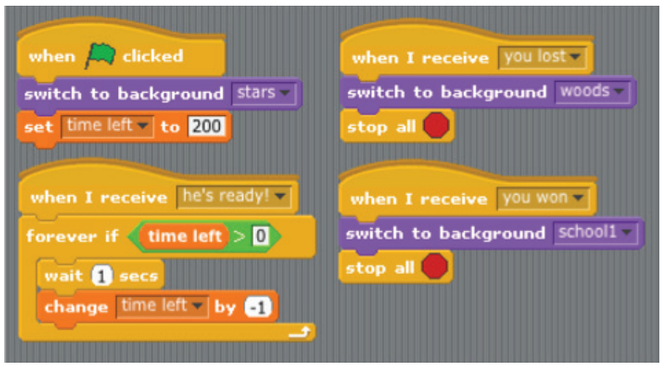
Monsters Multiplication - Level 3 SAN.

Here's a project we've borrowed for a game to test multiplication skills … but we think it could be a lot better! So use this as a starter but create your own (better) version.

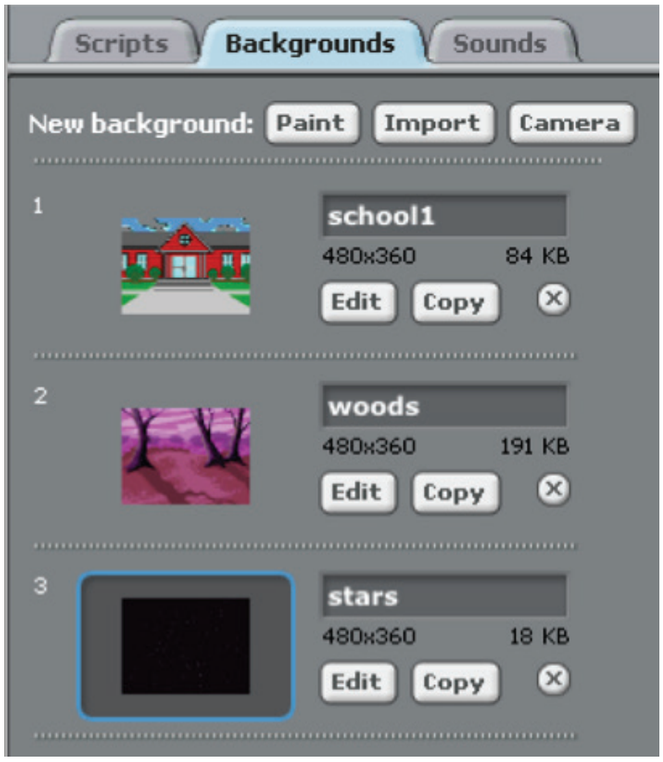
Script for monster



Script for Scene



Background used



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Intermediate Scratch

Name: _____

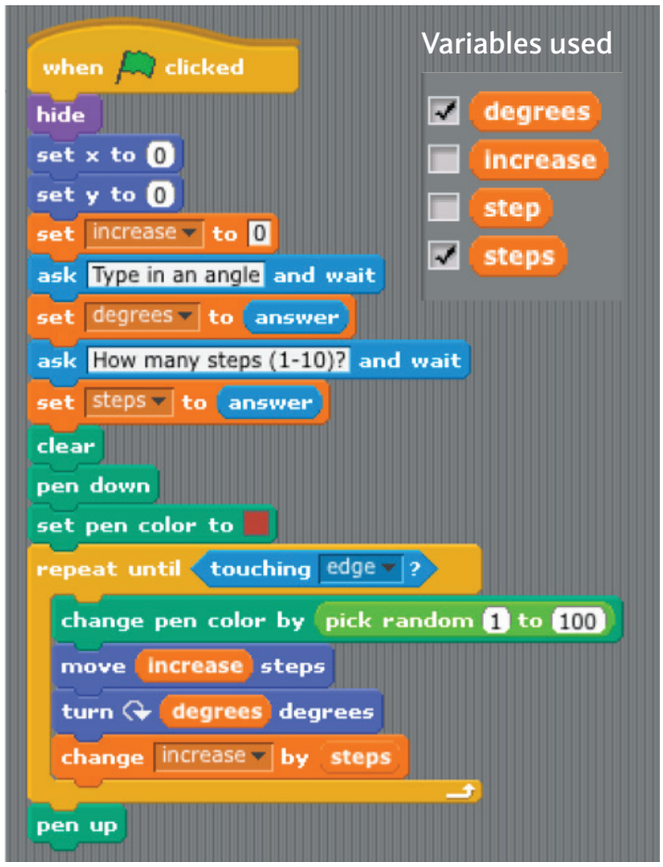
Date: _____

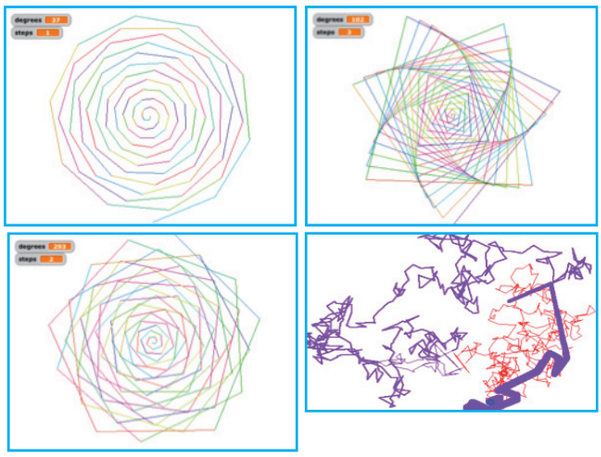
Sensai: _____

The 20 Line Challenge - Level 4 - SHI

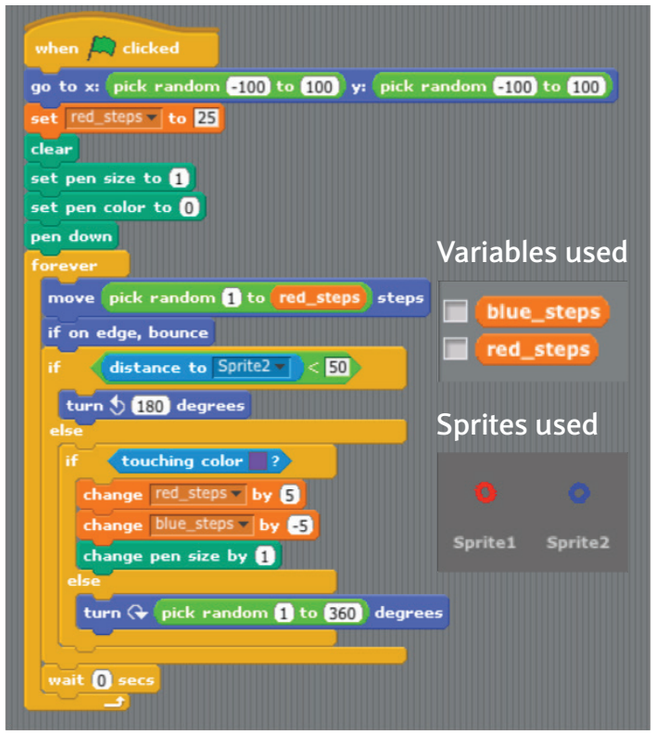
We came across a cool 'line drawing' project tweeted by a ninja from another dojo which we've added some variables to and which then gave us a idea! It's a great bit of Scratch coding and uses less than 20 blocks of code for some awesome results! We tried to see what we could do with 20 blocks or less and came up with the 'microbe battle'. Your challenge? Simple - what can you do with 20 blocks or less?

Line Drawing





Microbe Battle



Sensai Rob says: 'These microbe sprites move around randomly and 'feed' off each others trails until they get to max size. If they eat the other they speed up, if they get eaten they slow down, if they 'see' each other they run away! You can leave this running for hours!'

Hmmm … I think Sensai Rob has cheated a bit! There might only be 20 blocks of code here but he's used them for both the Red and the Blue Sprite. Isn't that 40 blocks of code or is it ok to use the same 20 on more than 1 sprite? What do you think? Shall we let him off?

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Notes

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Item ref:9913674 UKB360053