



# Imagine + Program + Share

## Using Scratch

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# Session Objectives



Introduction to Scratch



Uses of Scratch



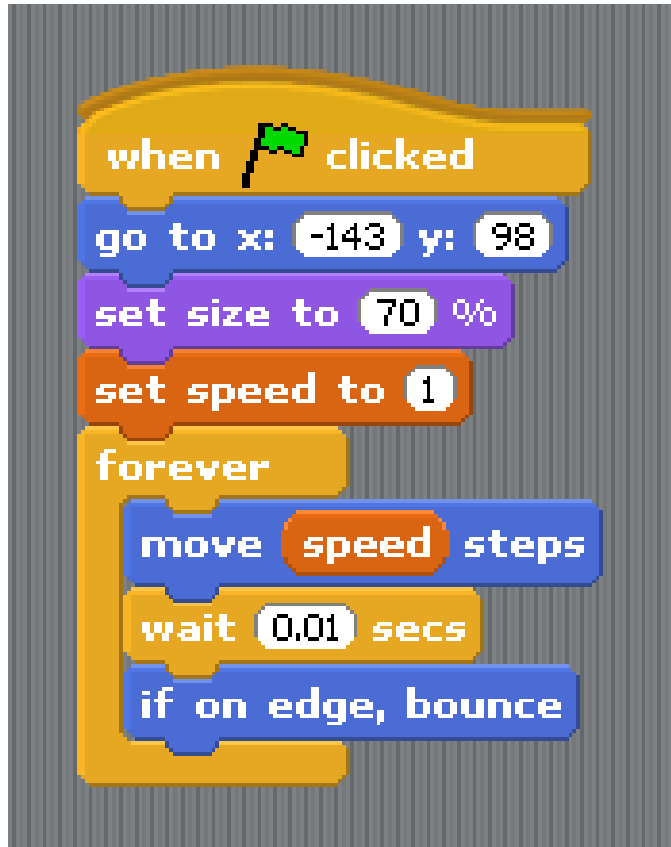
Links to the Renewed ICT Framework



Try it out for yourselves!



# What is Scratch?



- Scratch is a software application that allows us to make simple and complex programs for animating objects on the screen.
- You simply drag and drop instructions to build up your program

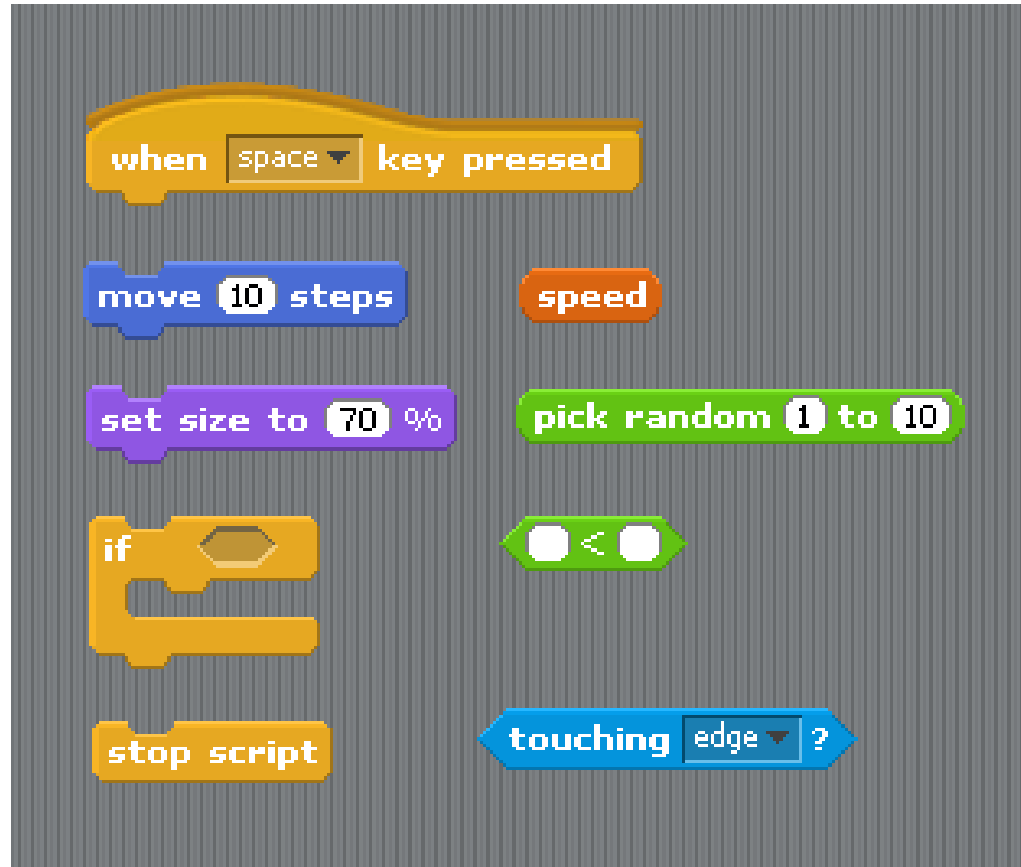


# Scratch Supports

- 🐱 “Building block” programming
- 🐱 Multimedia – graphics, animations, music and sound,
- 🐱 Sharing & collaboration
- 🐱 Concepts: repetition, conditions, variables, events, processes
- 🐱 Logo



# Building Blocks



Use of colour and shape to communicate key concepts

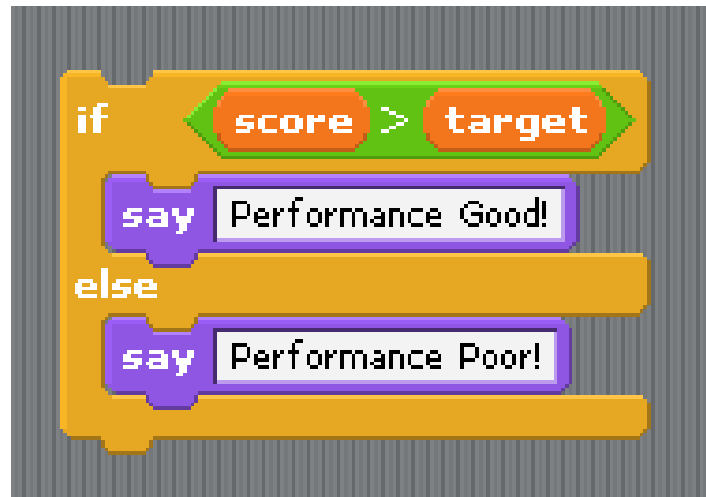


# Concepts - selection

Java

```
if (score > target) {  
    performance = "Good";  
} else {  
    performance = " Poor";  
}
```

Scratch





# Concepts - repetition

Java







```
for (int i = 1; i <= 10; i++ ) {  
    move_object(2);  
}
```

Scratch





# Sample Applications

-  Interactive stories
-  Animations
-  Games
-  Music
-  Art
-  Sharing applications on the web





# Uses of Scratch in Schools

- 🐱 Introduces students to creative multimedia programming
- 🐱 Developing computer games (e.g Dida Unit 2 & BTEC National Diploma for ICT Practitioners)
- 🐱 Computer Clubs
- 🐱 Primary Liaison sessions
- 🐱 To enhance the KS3 curriculum building on our Logo and Flowol schemes of work



# The new ICT Framework

Strand 2 - Developing Ideas

2.3 Sequencing Instructions

## **YR 7 Learning Objectives**



Rationalise a set of instructions by repeating sections



Plan and implement sets of instructions predicting outcomes before execution



# Resources

- 🐱 **free** software!!! <http://scratch.mit.edu/>
- 🐱 gallery (sharing & collaboration)
- 🐱 online user friendly resources including flash cards
- 🐱 tutorials (video & paper based)
- 🐱 a forum for discussion with other ‘Scratchers’



# Aquarium Project



 Lesson time!!!