My First Independent Scratch Project

3 hours

Approximately 40 minutes design and the rest for programming

Aims

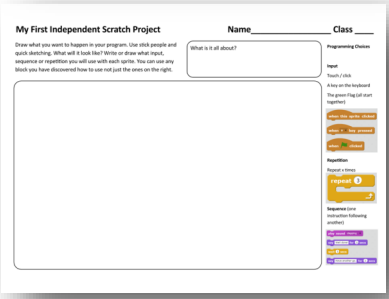
Pupils design and make their first simple Scratch project.

Computing Concepts

-**Algorithmic design** (what will my sprites do and what order will they do it in?)

-**Appearance Design** (What will my program, sprites and background look like?)

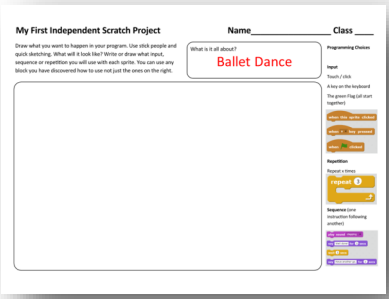
-**Input** -**sequence** -**repetition**



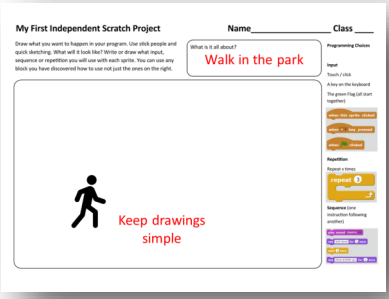
Explain to the class that after learning how to create inputs, sequences and use repetition through making (insert names of projects) they are now going to design and create their own project.

Open up the slides **how to plan my first independent Scratch project** shown on the left.

Show pupils the planner slide 2. Read the instructions on the top.



Slides 3-6 have simple example project names. Make sure you say that they will be able to think of better projects.

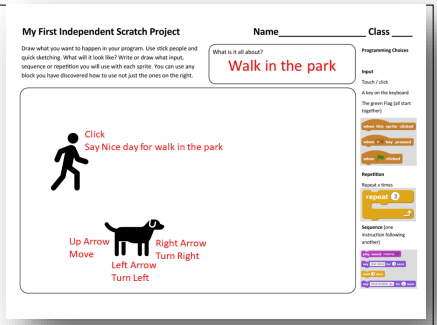


Slide 7 is a reminder to keep their drawings simple.

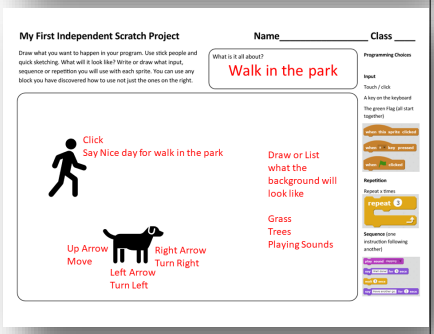
Slide 8 is a demonstration of how to plan what their program will do. What sort of input will they use? What will that input start? How long will it last for?

Question What is missing in this planning?

Answer Timings on the SAY command



Slide 9 is a reminder to plan what will go into the background. Remember it is only a plan so don't spend too much time drawing it.



Slide 10 is a final reminder to keep it simple.

Give pupils 20 minutes of dedicated design time. Those who need longer can have more time but others can start turning their design into a program.

Once pupils are programming tell them all that they can only have one teacher code hint so they need to make sure that they use that sensibly.

If they have a problem that is not code related such as *my copy of Scratch has frozen* they should say straight away.

Also instruct them not to help each other as this is their own work.

They may use the sequence card and the repeat x times loop card (Print 5 copies of each, fold them up and leave them on the side.) and refer to their sequence and repetition sheets, if you have given these out previously. They may also save their work and look at any of their previous Scratch projects.

At some point say that it is ok if their program looks or acts differently from their design as everyone adapts their design while programming.

As they are planning go round and make sure each idea is simple enough. There is often one or two pupils who want to recreate Minecraft without realising that this took many programmers years to create.

Adapted from a problem solving rubric created by Mark Dorling & Thomas Stephens hosted at http://code-it.co.uk/attitudes/

At the end of the project you could ask pupils to circle all the computing attitudes they have used.