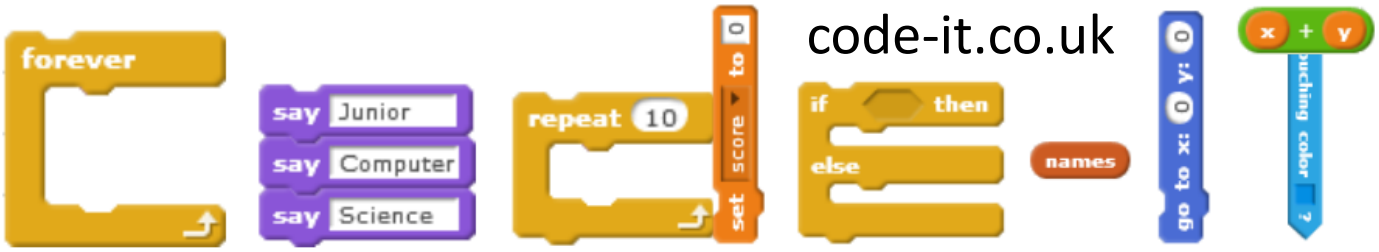

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Story Programming

Planning Aim Turn a story algorithm into a multiple scene story program

Computer Science Concepts

-All programming is an algorithm turned into code. Not all algorithms become code though.

-Algorithms are the thinking before you code. Where the user thinks what they want to happen and what order they want it to happen in. Algorithms are written, but pupils can engage in proto algorithmic activities by talking about what they want to happen.

-Programming is where we turn that algorithmic thinking into something that works on a digital device

Learning Path →

1, Share the Module Vision	2, Explore Story Effects in Scratch Jr	3, Create Story Algorithm	4, Turn Story Algorithm into Scratch Jr Code	5, Share Creations	6, Evaluate Programming

1, Share the Module Vision

Basically this is where you briefly share that your class are going to program stories using Scratch Jr.

You need to introduce the hook that you are going to use. My most recent Y1 & Y2 classes used Fairy tales and Winnie the Witch as that was their most recent literacy themes but I am sure you will have even better hooks.

Explain that you are going to think through great events from your chosen hook and experiment how to make Scratch Jr characters speak, hide/show, move, reset, grow/shrink and change scenes.

Explain that next session armed with these ideas you will create an algorithmic story planner and then code their stories the session after.

Don't help pupils too quickly as you take a way their struggle and learning opportunities!

Resources

Tablet Computers, Vision Slides, Algorithmic planning slides, algorithmic planner x?

2, Explore Story Effects in Scratch Jr

Many children will think that they are starting to create their story at this point so be sure to explain that this is a trial run to explore story programming. You may even want to focus your creation on another area.

Add Characters

Can pupils import lots of characters? Give them time to figure this out themselves and then give a masterclass for those that need it.

Plus button top right

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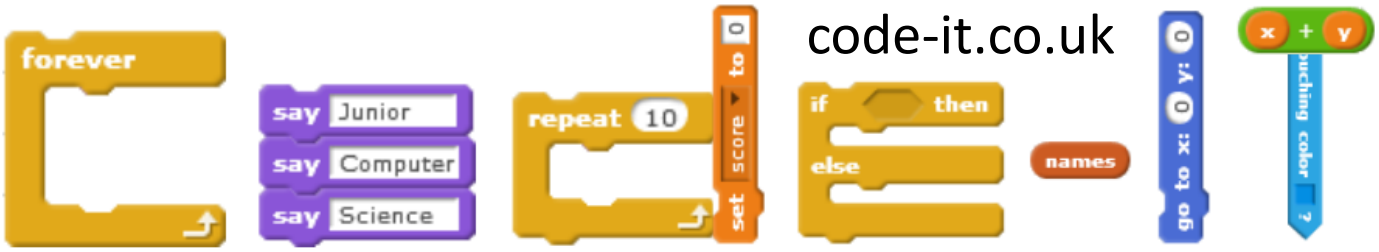


Story Programming Page 2

2, Explore Story Effects Continued

Delete Characters

Can pupils work out how to delete characters that they no longer want?

Hold finger on the middle of the icon and it will start to wobble. Then press the red cross to delete.

Rename a Character

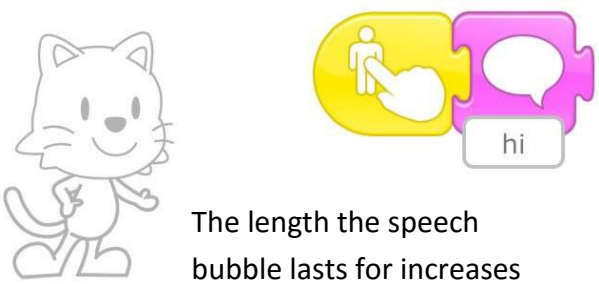
To rename the character (sprite/picture) press the paintbrush on the sprite and then rename in the painting screen at the top.

Make characters talk when you touch them

Challenge pupils to work out how they can program sprites to talk when they are touched.

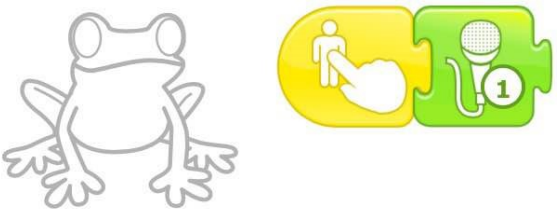
There are other methods to trigger speech but they do increase the complexity a lot.

Speech Bubble



The length the speech bubble lasts for increases as the length of the text increases.

Record Sound File



Make characters disappear

Challenge pupils to make a sprite disappear when you touch it and then reappear.

Make a character flash show hide & repeat

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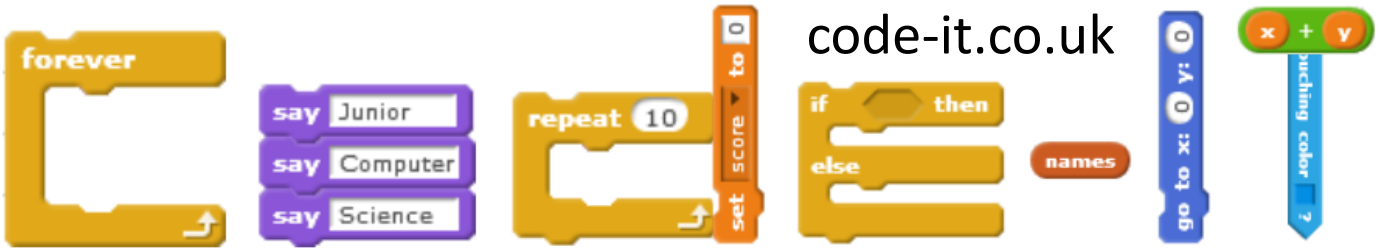

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Story Programming Page 3

2, Explore Story Effects Continued

Challenge pupils to make a character **larger** when touched

Challenge them to make a character **smaller** when touched

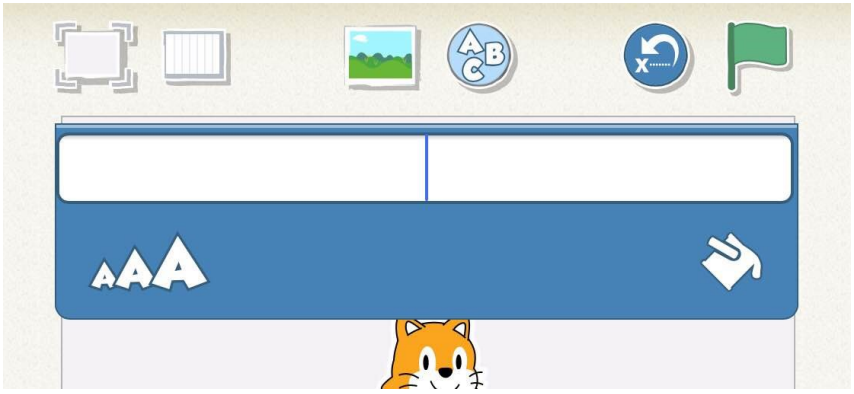
Challenge them to return the character back to its **original** size

Finally can they make a character walk and then decrease in size

Add Text

Show pupils how to add text at the top of a scene. Ask them when they might use this in a story. You might want to use a favourite picture book to illustrate this.

Touch the ABC icon to bring up the text editor. Note the AAA font size editor and the bucket for colour

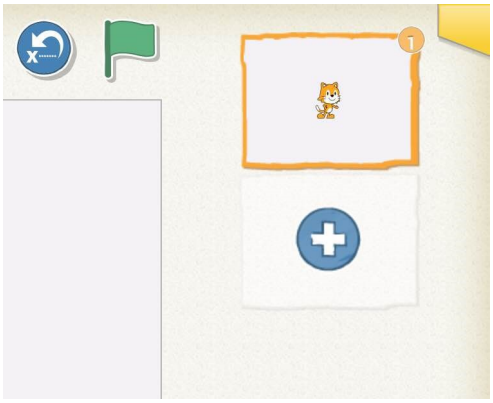


Once text is created you can drag it to where ever you need it

Can it be easily read? Does the background help you to read the text?

Moving from one scene to another

To create a new scene you touch the plus + icon in the top right of the program. This creates a blank scene which the user can change using the background editor.



Background Editor

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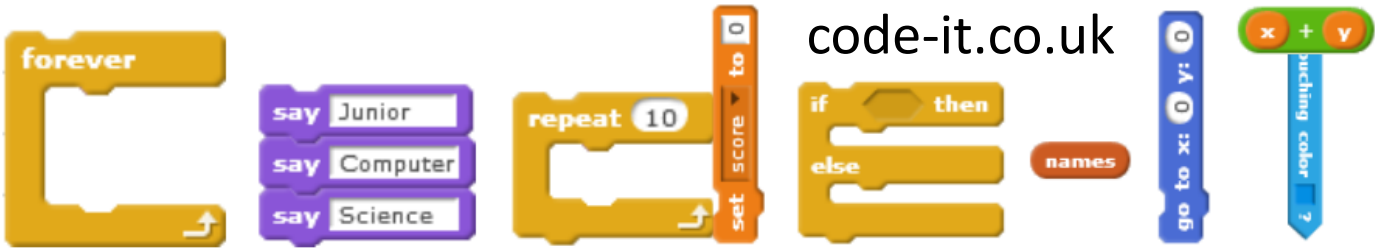

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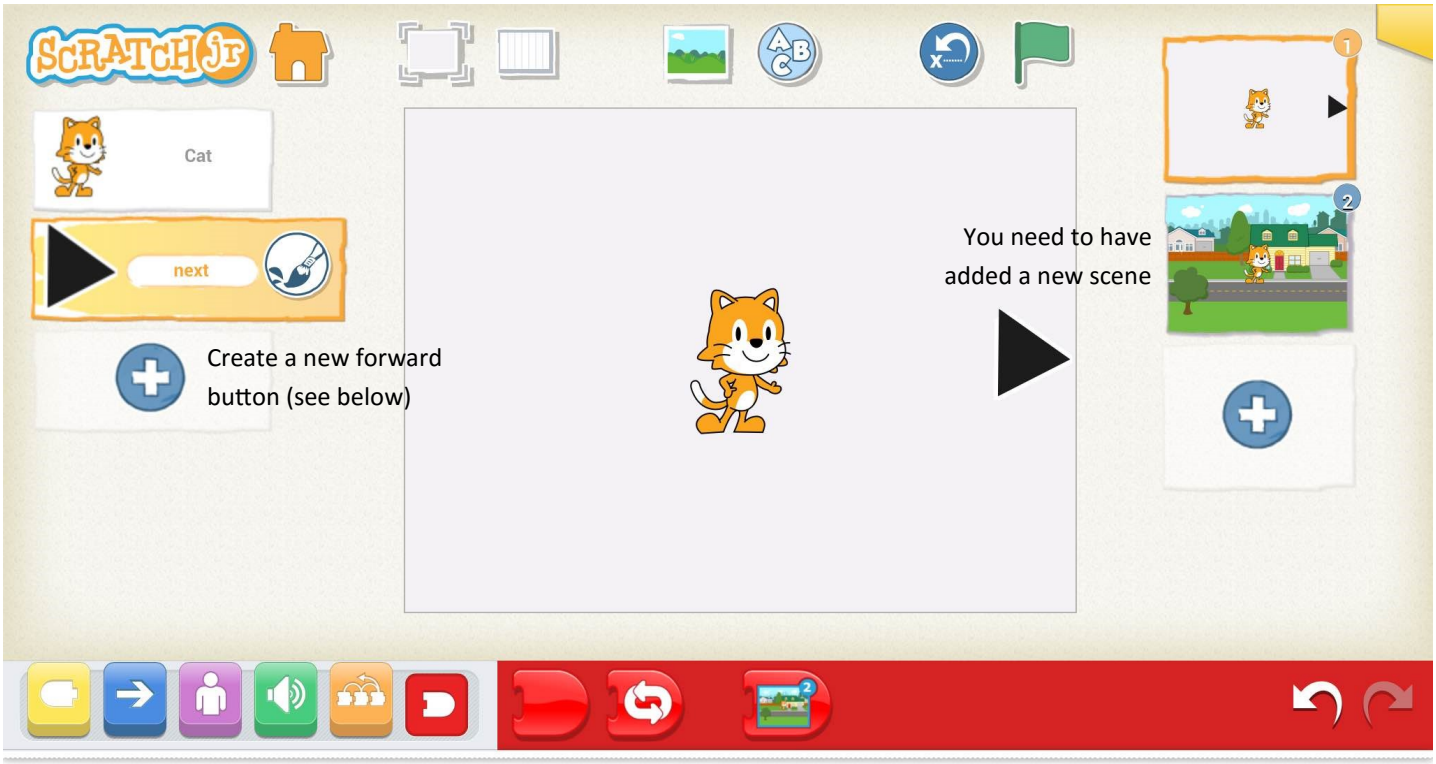
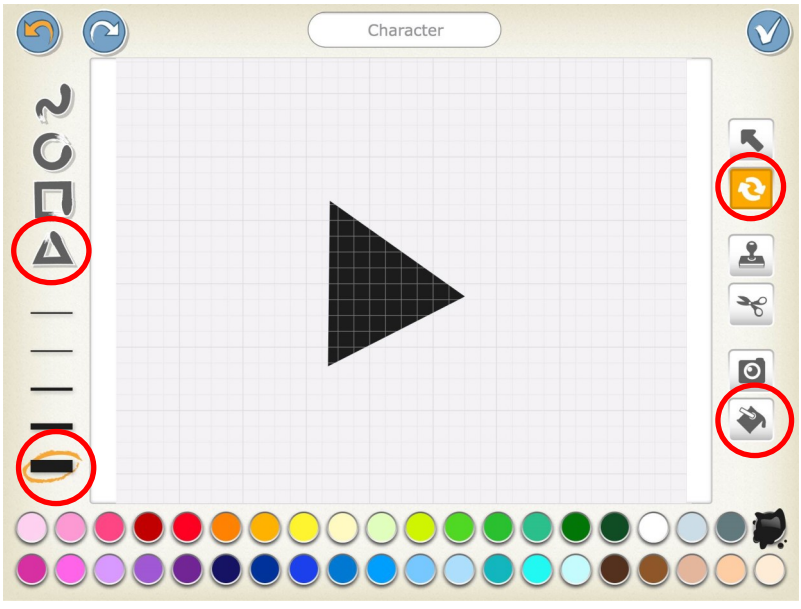
Story Programming Page 4

2, Explore Story Effects Continued

Creating a button to move onto the next scene



Create code to move the story on



Use the triangle tool, line thickness tool, rotate tool and fill tool to create a move the story on sprite

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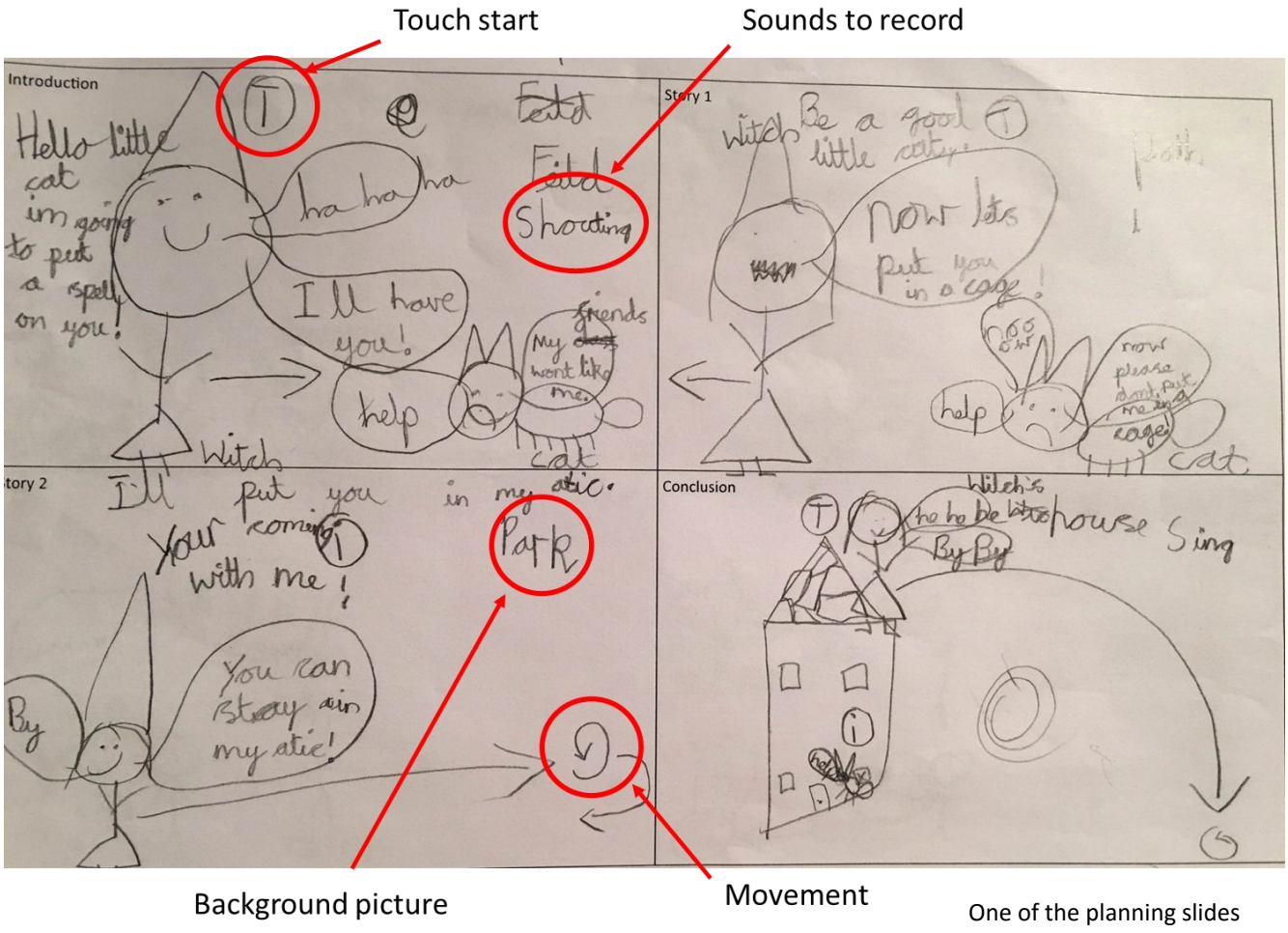
Story Programming Page 5

3, Create a Story Algorithm

This is the part of the planning process when it is best to move away from the tablets and concentrate on the story and the effects you want to use. If you skip this process you end up with disjointed unconnected stories that have lots of effects but little literacy substance.

Explain to your pupils that they are now going to plan a story. You could do this in pairs or plan individually, my personal favourite involves personal planning with a discussion partner but you know your pupils best.

Hand out the planning sheet (There are two to choose from and I have left the template so you can adapt your own) Use the slides to go through the type of planning symbols to use. I found it took 45 minutes plus to create a good planner. If pupils know that the tablet is there for them to go straight onto when they have finished they will often try to cut corners so my top tip is save step 4 for another session.



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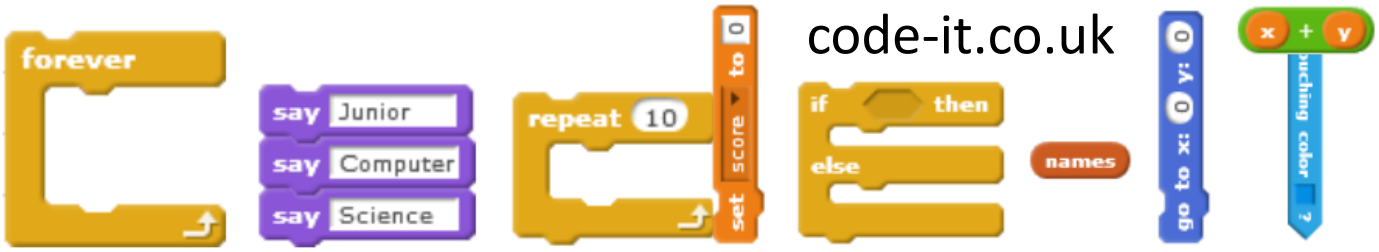

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Story Programming Page 6

4, Turn story algorithm into Scratch Jr Code

Allow pupils plenty of creation time to turn their story algorithm planners into Scratch Jr code. Lead small group masterclasses on any aspect that pupils have forgotten from part 2. Explain that it is fine for pupils to adapt/modify their story but they do need to stick to their overall plan.

5, Share Creations

Get all pupils to place their creations in full screen mode allow pupils plenty of time to try one other persons story. They will notice that once they have finished it is difficult to go back to the start. Challenge the class to create a start again button that takes you back to the first scene. Allow pupils time to make this.

6, Evaluate Programs

Now hand out a post it note for every scratch creation. Pupils can evaluate each others work using two stars and a wish, two things they like and one thing to improve. Insist that all comments are very specific.

Give pupils time to respond to the improvements or there is not much point in doing this.

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