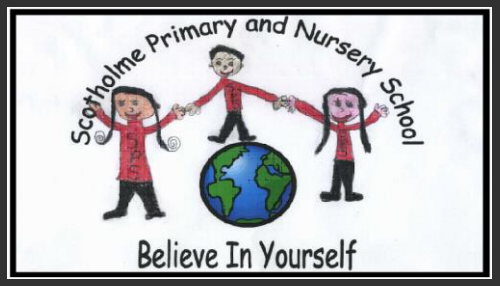


Scotholme Primary

Computing Curriculum 2014-15

Clive Ferrigan/Sean Hall

Scotholme Primary School

1 Computing Curriculum 2014-2015

This is the second draft of the new Computing Curriculum for Scotholme Primary School for the academic year commencing 2014-15. All year groups across school will be using the new curriculum from September 2014. Foundation to Year 4 will have 1 session in the computer suite each week while Year 5 and 6 will have 2 sessions. In addition to this, it is the intention that, once they are integrated into the school system and set up and managed satisfactorily, each class will have 1 session a week using a whole class set of iPads. We are initially starting with 10 iPads, aiming to build up to 30 by September 2015. This will depend on their use, the appropriateness of the software used on them and how they can be managed by staff and handled by children throughout the school.

1.1 Aims Of The Computing Curriculum

1.1.1 At Scotholme, we want our children to develop their confidence and competence in the technological age in which we are living, adapting to new technologies and using them safely and effectively. The children should understand the basic workings of computers, networks and the internet and begin to write code and debug it, which will allow them to create their own programs or applications.

1.1.2 It is our aim that children will:

- Use technology safely and responsibly to communicate with others
- Develop an ability to write code in a variety of practical and inventive ways
- Communicate their ideas effectively using a broad range of programs and applications
- Collect, organize and use data effectively
- Understand how devices are connected together

1.2 Curriculum Organisation

Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
e-Safety						
Algorithms						
Coding						
Understanding how computers work						

1.3 Long Term Plans For Each Year Group

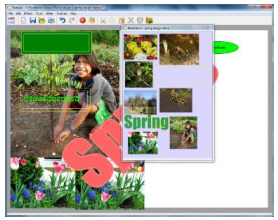
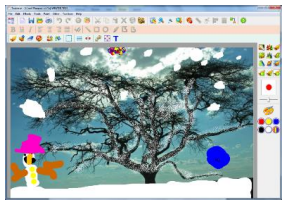
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Additional
FS	See separate Foundation Stage curriculum developed by Clive and Kat						
F2	ICT to fit with Topic	ICT to fit with Topic	Beebots	ICT to fit with Topic	ICT to fit with Topic	ICT to fit with Topic	Algorithms (basic instructions)
Year 1	Espresso	Seasonal Changes*	Espresso	Beebots	Under The Sea	Espresso	Algorithms (link to lit instructions)
Year 2	Nocturnal Animals*	Espresso	Story timeline	Espresso	Human Logo/Beebots ICT to fit topic	Espresso	Algorithms (link to lit instructions)
Year 3	Espresso	Story timeline	Espresso	ICT to fit with Topic	Espresso	Light And Shadows*	Data loggers Algorithms (flow charts)
Year 4	Logo	Espresso	Story timeline	Espresso	Living Things and Their Habitats* (Time Lapse)	Espresso	Data loggers (Aut 1 and Spr 2*) Algorithms
Year 5	Espresso	Scratch	Espresso	Living Things and Their Habitats* (Time Lapse)	Espresso	Logo ICT to fit topic	Algorithms (for small game)
Year 6	Espresso Spreadsheets*	Logo Spreadsheets*	Scratch	Espresso Documentaries*	Flowol	Espresso	Algorithms (for small game)

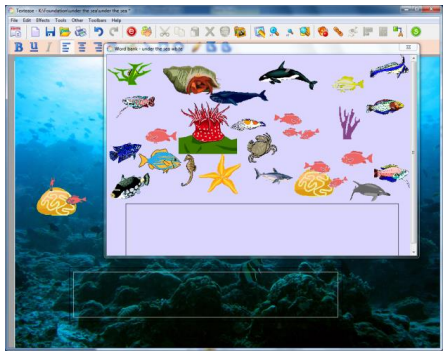
Working Scientifically links*

Commented [SH1]:
- Y3/4: Gather, record data*
- Y3/4: Record bar charts and tables*
- Y5/6: Take measurements, using a range of scientific equipment*
- Y5/6: Record data and results of increasing complexity using scientific diagrams* and labels, classification keys*, tables, bar and line graphs* and models

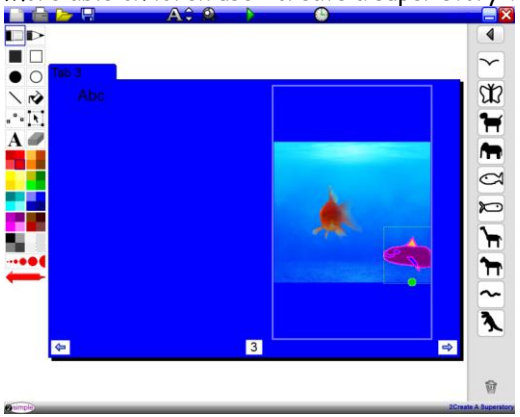
1.4 Long Term Curriculum

1.4.1 Year 1

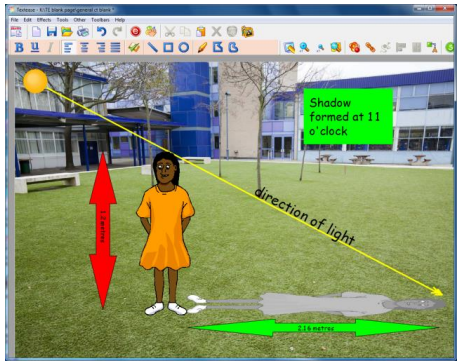
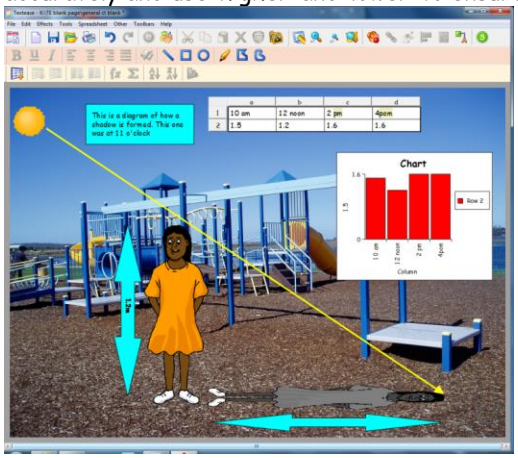
Topic/Objectives	Detail/Example
Seasons	The children design two posters one for each season.
ICT:	   Using paint tools the children change the look of trees to match the seasons.
	Using 2create a story they make a small book of the seasons and what we do in each season. 

Animals including humans – Under the sea	The children explore under the sea. The less able pupils drag and drop to create an undersea scape. They also use a text box to write about the world they create. 
Me and my world	They also use a prepared "create a story booklet to write about animals which live in the sea. 

1.4.2 Year 2

Animals including humans (Habitats)	Amazonian animals plus other animals from around the world The children create Superstory file using simple animation of the Earth to show where the animals are located. They add animals to the page and fill the background of the image with colour of the page as this program does not support transparency.   More able children use 2create a super story to make a tabbed book about creatures around the world.  Most children will be able to create their book, select appropriate images, resize them and add text. The more able can also add an animation of an Amazonian animal to one of their pages.

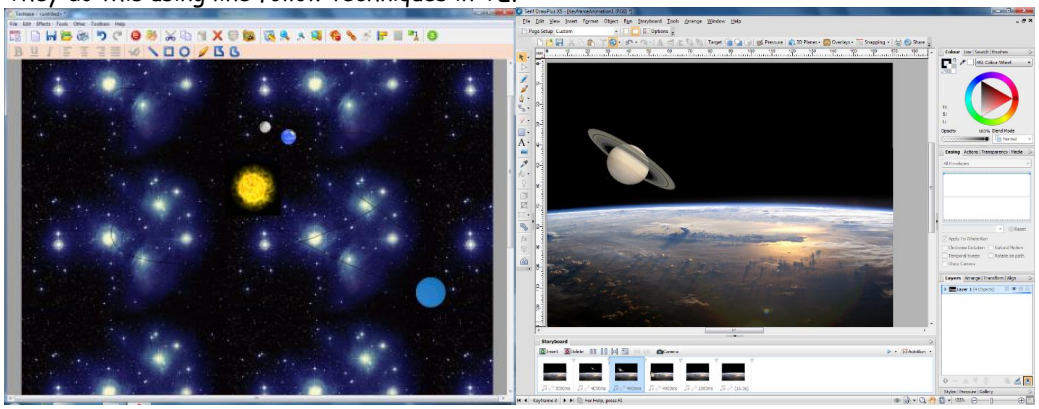
1.4.3 Year 3

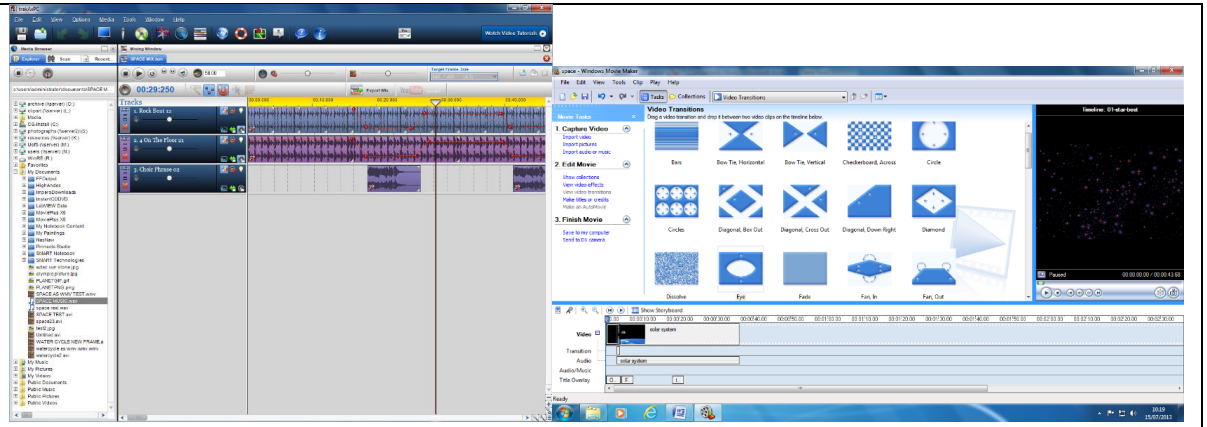
Light and Shadows	The children are asked to create a diagram for a text book to show how shadows a re formed.  This uses a range of graphic tools and allows the children to explore using the right mouse button to distort objects to suit their purpose. They also learn to use the arrow keys to align objects more accurately and use 'higher' and 'lower' to ensure that all objects appear in the right plane.  The extension for this activity is to include a spreadsheet and graph showing the change in the shadow length over time.

1.4.4 Year 4

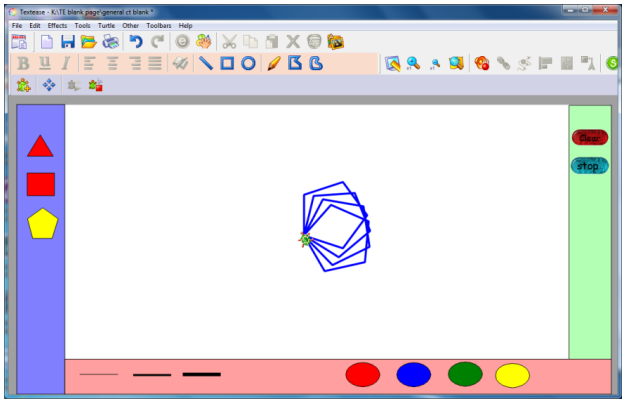
Sound (Data loggers)	

1.4.5 Year 5

Science	Planets and planetary motion. The children create an animated model of the solar system with the timings of orbits to scale. They do this using line follow techniques in TE.  They also include a fact file about the planets in order from the sun on the same page. As an extension for most able, the children use the key frame animation in DrawPlus to create a video of a planet moving across the surface of another planet. They can also use trakax to create music to go with their space animation.



1.4.6 Year 6

Logo	Programming the turtle to create a game for a young child to explore shapes and patterns including changing colour and pen size. 
Excel	Children to use spreadsheets to present their findings from Science experiments and add their conclusions in text boxes. Add titles and photographs to create a display poster for their exhibition space in KS2 open area.