Learning Activities KS1from Naace and CAS

**Algorithms**

* Produce a Storyboard of instructions to make some toast (maybe 4 slices, to show Repeating Instructions - Iteration). Get children to actually draw the steps to ensure enough information is given to the computer/toaster to produce the appropriate output.
* Create a word algorithm for other 'Real world' activities, such as Cleaning Teeth, or Preparing a bowl of cereal. Use prepared, unfinished sentences with a dictionary of acceptable words that should be used to complete the algorithm.

**Simple programs.** These may be sequences of instructions for controlling the movement of a robot (e.g Bee Bot or ProBot) or an on screen turtle or sprite  
Activities may include:  
Ibug/ remote control to:

* Layout cards of sounds or numbers. Can they find the correct phonic sound or answer to a question by controlling the device to the correct card.
* Can they move in sequences to visit different events in a story, spell out a word etc

**Program a Beebot**

* To visit the key events of the Little Red Hen story in order.
* Move up and down a number line to solve simple Maths problems (7-2) or identify shapes on a Beebot mat
* Move around a maze
* Use the BeeBot software 'Focus on BeeBot' to work through the Flash Cards supplied for different mats.

**Program Probot:**

* Travel up to a cone, go round it and come back
* To follow a simple route

**2Go or Textease Turtle**

* To move from starting point to an object on the screen.
* Demo journey to school in Textease CT using Street Map of area
* Can any of the children draw a square
* (Sequence cards are helpful for children to layout sequence as they program)

**New Roamer**

* Program the Roamer to deliver items around the classroom or to the next classroom

**Scratch**

* To get a sprite to move on the screen
* Can they get the sprite to say hello etc.
* Can they add a sound to the sprite
* Can they create a sprite of their own

iPad - Daisy the Dinosaur

* To get a sprite to undertake a simple instruction (move across the screen)
* To get a sprite to undertake a sequence of instructions
* To get a sprite to repeat a sequence of instructions
* To get a sprite to act upon an input

Ipad- Beebot App  
Logical Reasoning

* Using Beebots to show how the 'effect' of turning Right 4 times, will 'cause' the Beebot to end up in the same place as it began.
* Can they predict the outcome of a simle program to move the Beebot, and explain why this would happen.

Creating and Manipulating digital content

* begin using a mouse and keyboard to create and modify documents on screen (eg: 'My name is....'). Use the arrow keys as well as the mouse to move around the document, in order to correct mistakes and/or add information.
* allow the addition of images from repositories such as Clipart or those saved on the user area/accessible network area.

Recognising Common Uses of Technology

* Use a different lesson to tie into this. Perhaps the idea of Control of the Beebots/Probots; What else do we use that is 'controlled'?

Communicating Safely and Respectfully online.

* Use the ThinkUKnow website for ideas and lesson plans of how to teach e-Safety issues to KS1. Hectors World or Lee and Kims Adventures are both very good.
* The Childnet website also has good resources.
* Links with Keeping Personal Information Private - again , using the above named websites will give good lesson ideas for this.