AN INTRODUCTION TO CROCODILE CLIPS

Crocodile Clips is a program that simulates electronic circuits. It allows you to model and test out your circuit ideas. You can draw your circuits using different component symbols and connect them up to form your circuit. The circuit will then function, showing you what happens.

Start the program, you will see a blank page with the following Menu and Toolbar.

Firstly is a crocodile which will delete any selected component or connection. You can also select this, then any object you click on following that will be deleted.

The next eleven buttons will allow you to drag any of the components available and place them onto the page. By just clicking on these you will reveal another menu of similar components.

The next three allow you to measure various aspects of your circuit eg, voltage, current, waveform and the final one will pause the simulation.
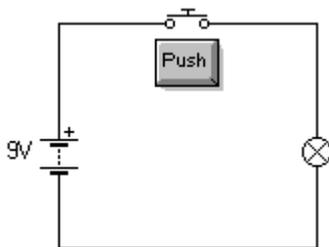

Try constructing this simple circuit. Select the components and place them roughly where they need to go. Then click on the ends of the components and a reel of wire will appear. Move to the end of the component you want to connect to and click again.

When you have finished, press the Push button and observe what happens. Was it what you expected?

Try the following circuits and observe what happens. Try to predict their function. If you destroy any components, select **Indestructible components** from the **Options** menu, then click the crocodile onto the component that was destroyed. A message will tell you why it was destroyed. Remember, this is a simulation, you can never do any real damage!
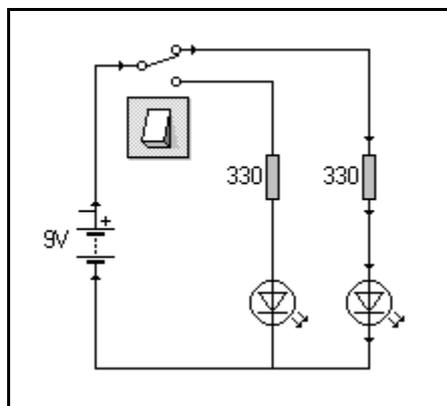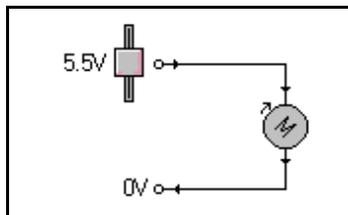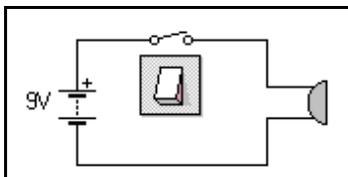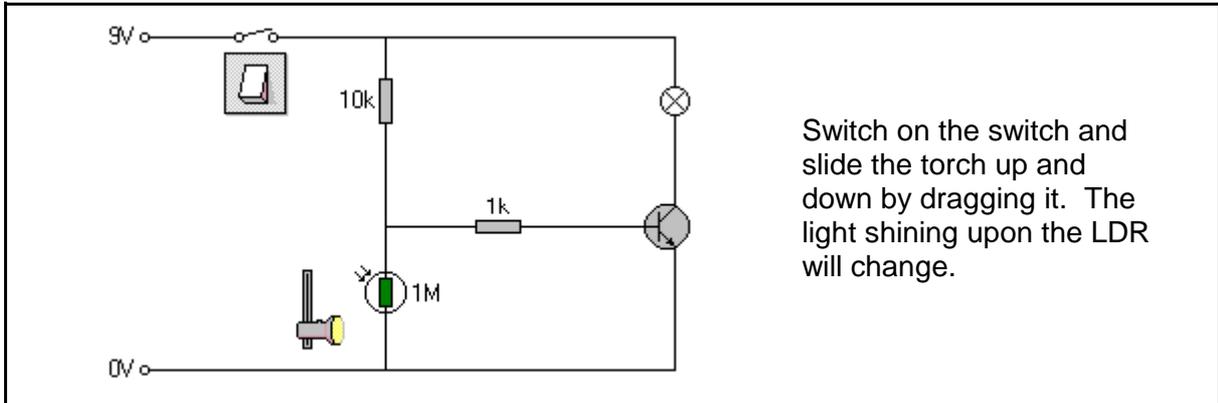

To change the value of a component, click on the value and an edit window will appear. Make the changes and press OK
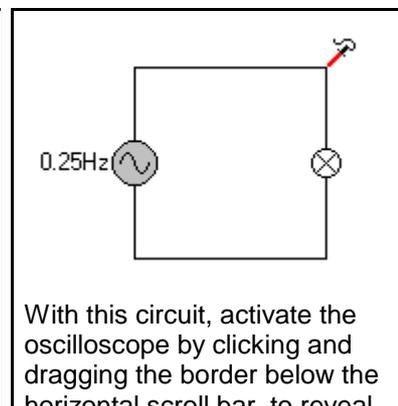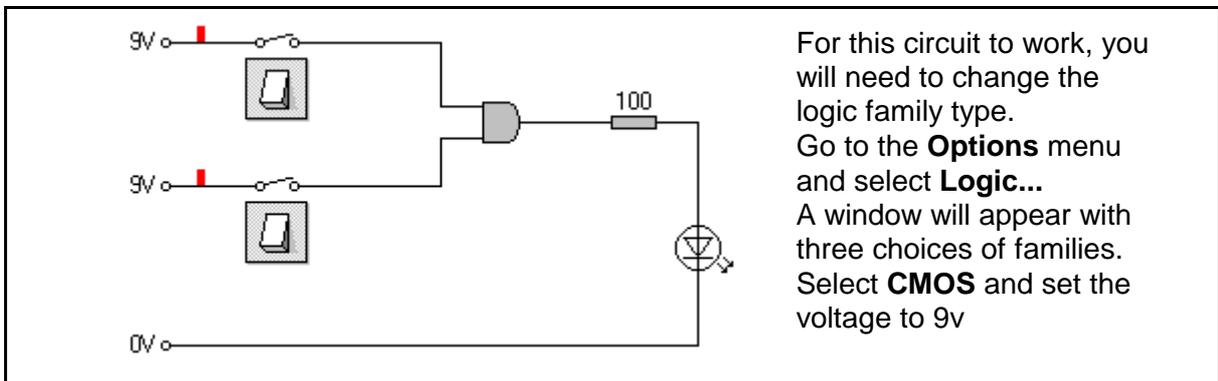

With this circuit, activate the oscilloscope by clicking and dragging the border below the horizontal scroll bar, to reveal the scope display
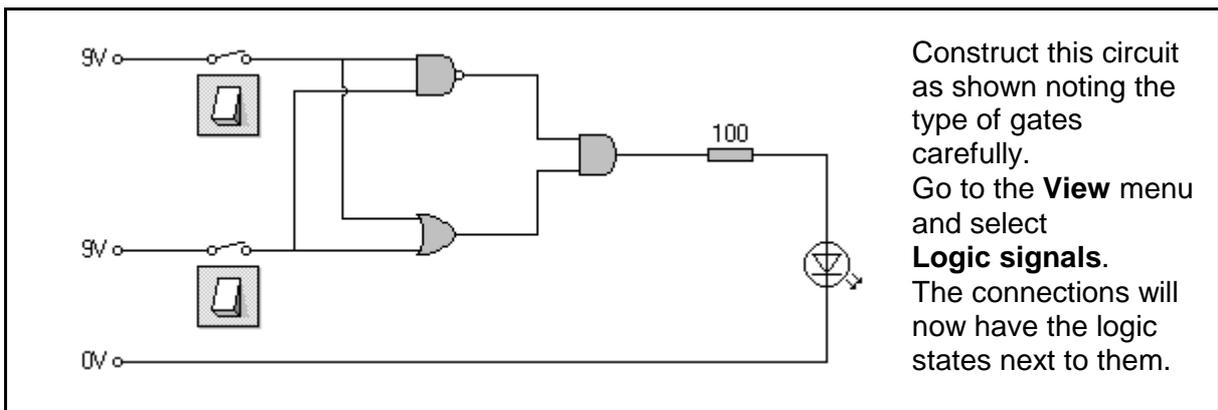
CROCODILE CLIPS ctd

Switch on the switch and slide the torch up and down by dragging it. The light shining upon the LDR will change.

For this circuit to work, you will need to change the logic family type.
Go to the **Options** menu and select **Logic...**
A window will appear with three choices of families.
Select **CMOS** and set the voltage to 9v

Construct this circuit as shown noting the type of gates carefully.
Go to the **View** menu and select **Logic signals**.
The connections will now have the logic states next to them.
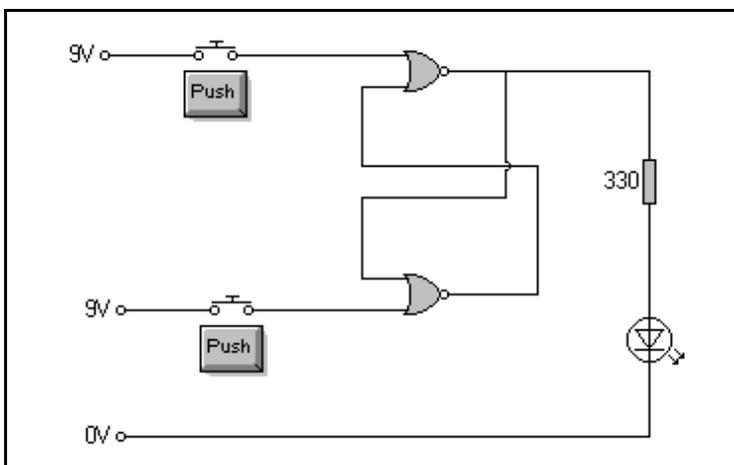
Try designing your own circuits and make changes the values. Notice the effects of these changes.