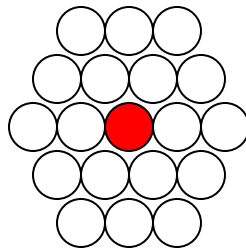








## The Penguin Experiment Using Ecolog's Temperature Sensors

Ever wondered why penguins huddle together? This experiment will help you find an answer...

You will need several polystyrene cups, all filled with hot water and bunched together



1. Plug the two external temperature probes into EXT1 and EXT2 on the Ecolog.
2. Double-click on the Sensing Science icon: 
3. Double-click on *Graph*. You'll see a message asking you to press Run. Press the runner on the Ecolog and click OK. (If the message keeps appearing the batteries may be flat.)
4. Click on the page icon  in the bottom left corner of the screen.  
Click on *Continuous*.  
Click *Next* and take off all the ticks by clicking on them.  
Click once in the EXT1 and EXT2 box to tick them. Click on the down arrow, select *Temperature* then *Finish*.
5. Put one probe in the middle (red) cup and the other in one of the outside cups. Press the red arrow  to start recording the temperature.
6. Click Pause to halt collection of data: 

7. Click *Tools*, then *Title*. Enter a suitable title which explains your experiment. Don't forget to include your names in the title! E.g. "A graph to show ... by ..."
8. Click *Text*. Click where you wish to place a comment. Type into the yellow box. Click OK, then click where you want to place the label.
9. To print your graph, click *File* at the top of the screen. Select *Print graph*.
10. Which cup of water stayed the warmest for the longest amount of time? Does this answer your question?