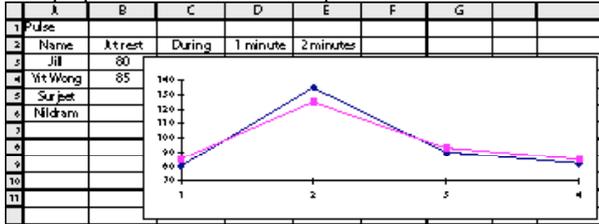


Who is the fittest?

How could you find out who is the fittest? Fitness has something to do with how quickly our bodies return to normal after exercise. The children can collect pulse or breathing readings from others in the class. They can record their results in a **spreadsheet** program and use these to draw graphs. How does the graph show who reached the highest pulse? Is this person the fittest? How does the graph show who is the fittest?



IT: Handling information

Does your temperature change when you exercise?

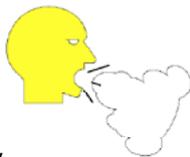
When you exercise you use energy and some of this appears as body heat. You can use a **temperature sensor** to measure this by holding a **temperature sensor** in your hand, or taping it to your body. Start the computer recording and measure your temperature as you rest, exercise and recover. Does your temperature rise when you exercise? How soon immediately you start to exercise? How soon does your temperature return to normal? How does the graph show you this?



IT: Measuring

Is there water in our breath?

There is a little water in the air, but we add to it when we breathe out. This water comes from our food. You can use a **humidity sensor** to measure the water level in the air you breathe. You simply breathe out over the sensor and watch the trace on the screen rise. Is there more water in the air or in the air you breathe out? If you exercise (i.e. you burn more food) do you breathe out more water? Why do you think this happens?



IT: Measuring

How do hospitals keep us alive?

See the control topic

You can use a computer **control box** to imitate a baby incubator. You might use a **temperature sensor** and a battery operated fan connected to a control box. You then write a control program to monitor the temperature and switch on the fan if the temperature goes above a certain level. This is also a very good 'model' of the way we keep our body temperatures steady. See the control section for a worked example.

IT: Control

How can we keep healthy?

You can get the children to research the ways we can keep healthy and they can use the computer to produce a poster on this. So they might cover food, exercise, drugs or smoking and include pictures with their information, statistics or whatever. The computer helps, not just in assembling the elements in the poster but in allowing them to test a draft on their audience.



IT: Communicating

Why don't people stop smoking?

To make children aware of how they can be drawn into a dangerous habit, the children can do a survey to find out why people took up smoking. They might start by discussing what they could find out by doing such a survey and move on to recording and analysing their results with a **database program**.

IT: Handling information

