

Scenarios

1. A mixed ability Year 7 class are studying States of Matter and as part of the lesson carry out an experiment on effect of heat on stearic acid, recording the temperature and the state of the substance every minute. They then draw a graph of temperature against time. One group carries out the experiment using a datalogger and a temperature sensor. Towards the end of the lesson, the teacher displays the results from the datalogger on a whiteboard, has a group discussion and gives a printout of the graph to each pupil.
2. A Year 11 Class are studying rates of reaction and are looking at the Haber Process. The teacher uses some simulation software and an interactive whiteboard to demonstrate what happens when various conditions are changed.
3. A mixed ability Year 7 class are finishing off a module on Earth and Space. For the penultimate lesson, the teacher allocates a planet to each group, takes them to a computer suite and gets them to find out interesting facts about their planet. He had previously downloaded some sites onto the school intranet. Their task, for the lesson, a homework, and the start of the next lesson is to present their findings using a poster.
4. A low ability Year 8 Class has almost finished a module on the Atmosphere. For their last lesson, their teacher takes them to a computer suite to find out some interesting facts and pictures about air and its constituents to make into a poster for homework.
5. A Year 10 mixed ability group are doing an investigation on rates of reaction. The reaction they are studying normally involves pupils judging whether enough precipitate has been produced to obscure a cross. This group are given light sensors and a datalogger and asked to plan and carry out the investigation over a week. (This class are used to using dataloggers and sensors)
6. A Year 10 Class is studying the reactions of Group 1 and 2 elements. The teacher uses part of the lesson to demonstrate the reactions of these metals (including caesium) on an Interactive Whiteboard using a CD-ROM. (They have not done a practical or had it demonstrated to them).
7. A Year 8 Class do an experiment on colour mixing using filters and ray boxes. In the last 15 minutes the teacher demonstrates colour mixing on an interactive whiteboard using an applet (downloaded from a website)
8. A Year 8 Class is studying pressure. As part of the lesson, they measure the area of their feet and their mass. They then enter it into a spreadsheet (created by their teacher) which converts their mass to kg, then to weight and works out the pressure of each individual exerts in N/cm^2 . The spreadsheet also includes examples of pressure of some animals and a woman in high heels. Towards the end of the lesson they have a group discussion about the results and what conclusions can be drawn. They all get a copy of the printout.
9. At the start of a Year 10 Lesson, the teacher uses PowerPoint to display a flowering plant with arrows pointing to the various parts. She then asks the names of each part and as they answer, the name appears on the press of a mouse button.