

<b>Biology</b>	<b>Lesson 2: Organ transplantation – the facts and dilemmas</b>
<b>Curriculum Key:</b>	Could link with homeostasis in all schemes; fulfils How Science Works
<p><b>Objective(s)</b></p> <ol style="list-style-type: none"> <li>1. Understand that research and developments have enabled medical scientists to advance in their abilities to transplant organs</li> <li>2. Make life &amp; death decisions based on both scientific and social evidence.</li> <li>3. Be able to explain the ethical dilemmas and protocols associated with human organ transplantations</li> </ol>	<p><b>Resources needed:</b></p> <p>Organ transplant key dates cards</p> <p>Time sheet, PowerPoint, GP notes and personal background cards, hospital records, clinical director report <i>proforma</i> and 'Medicine Today' worksheet..</p>
<p><b>Starter: 10 minutes</b></p> <p>Using the 'organ transplant – key dates' cards/info. Place them in chronological order. Students must look carefully at the clues that can be found within the detail to order the events</p>	<p><b>Teacher input/assessment</b></p> <p>Organ rejection is key to the successes that follow. Note the complexity of the surgery as the research develops.</p>
<p><b>Main Activity 1: 20 minutes</b></p> <p>Given 2 very seriously ill cardiac patients – make a life/death decision based on the evidence provided. Set the scene with a PowerPoint and then divide into groups to scrutinise the personal, GP related notes and cardiac team's test analysis.</p>	<p><b>Teacher input / assessment</b></p> <p>Show PowerPoint. Divide class into suitable groups. (see teacher notes). Hand out evidences for them to make an informed choice for the organ recipient.</p>
<p><b>Main Activity 2: 15 minutes (optional)</b></p> <p>As clinical director responsible for cardiac surgery - write a short report to the hospital trust managers, detailing how you came to your final decision (this must be fact based).</p>	<p><b>Teacher input / assessment</b></p> <p>Each team must produce a report on how they came to their decision. Perhaps they could report back to the whole group.</p>
<p><b>Plenary: 15 minutes</b></p> <p>Given a newspaper article students must answer the accompanying questions. This is a comprehension exercise focusing on 'scientific evidence', 'ideas', 'ethical issues' and 'conjecture'</p>	<p><b>Teacher input / assessment</b></p> <p>Students need to read the article carefully and answer the questions (either individually or in small groups).</p>
<p><b>Learning Outcomes:</b></p> <p><b>All students must:</b> complete a transplant time line, make a group decision and give a supporting reason for their choice based on the evidence provided.</p> <p><b>Most students should:</b> as above plus appreciate that there is more to organ transplanting than just who seems to be the most deserving recipient. Take an active part in the decision making and give suggestions for the outcome of the alternative choice.</p> <p><b>Some students could:</b> Lead their groups and link ethical dilemmas and medical facts. Make a decision and offer a rationale for the application of their ethical approach into making their moral decision.</p>	
<p><b>Key Skills:</b> Collecting evidence to make an informed decision. Role play. Communication and data presentation</p> <p><b>Key words:</b> Xenotransplant, organ rejection, ethics, cardiac disease</p> <p><b>Homework:</b> Write 'Hospital front page news' or finish newspaper article comprehension.</p>	<p><b>Differentiation:</b></p> <p><b>More able:</b> Will lead/influence the decision making based on evidence and be able to communicate their decision with a coherent argument.</p> <p><b>Less able:</b> Will be party to the decisions/report.</p>