

Bleeding

**1. Details of the teacher**

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| Name: | Date: | Time: | Class: |

**2. Topic overview**

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| **Suggested timing for session (excluding optional activities) is 60 minutes.**  **Teaching staff notes:**  \*Please check before playing the video content of this topic that students all students are not likely to be affected by scenes containing bleeding. \*  Delivery of this session must ensure that all students maintain the safety of themselves and others, they should learn that rushing into a situation to assist a casualty may cause further harm to themselves or others.  The class will gain an understanding of what can happen when bleeding occurs relating to blood loss and the possibility of shock occurring. Students should be able to demonstrate the skills to treat a casualty who is bleeding. They will recognise that a severe bleed can be serious and that they must act calmly to get help, assist and monitor a casualty until help arrives.  Learning materials for this session will be a PowerPoint presentation, video footage and supported teacher demonstration. Engagement in role play scenarios will allow students to demonstrate first aid skills learnt. |

**3. Key words**

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| * **safety** * **minor** * **severe** * **bleeding** * **heart** * **arteries** * **veins** * **positioning** | * **shock** * **oxygen** * **red blood cells** * **circulating** * **white blood cells** * **infection** * **bandaging** * **reassuring** |

**4. Learning outcomes**

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| **By the end of the lesson, students will be able to:**   * Ensure the safety of themselves and others. * Assess a casualty’s condition calmly. * Comfort and reassure a casualty who is bleeding. * Seek medical help if required. |

**5. Details of activities and resources required**

Note: Feel free to choose activities to fit the time you have available. For example, you could do one task from each introduction, main input and optional categories.

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| **Introduction** | |
| **Activity** | **Resources required** |
| * Use accompanying PowerPoint presentation | Bleeding |
| * Ask the class if anyone has ever helped someone that has had an accident and has been bleeding. | N/A |
| * Explain the learning outcomes of the session | Slide 3 |

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| **Main Input** | |
| **Activity** | **Resources required** |
| **Basic anatomy**   * Use the slide to explain how the heart pumps blood around the body. Explain that blood is made up of lots of different parts that all have a role. * Students to see if they can find the missing word on the PowerPoint slide. You can consider using wipe boards to see if students can guess independently or use a show of hands for answers. * Students need to understand that the heart pumps the blood around the body carrying vital oxygen to the major organs which helps to keep us alive. | Slide 4 |
| **Let’s make blood**   * Print out the activity sheet to follow instructions on how to make blood. * Students should learn basic blood content by using different objects to represent parts of blood (red blood cells, white blood cells, plasma and platelets). | Slide 5, activity sheet A5 |
| **What do you see?**   * Ask students to look at the slide. Look at position of the heart (centre and left of mid chest) look at how blood supply is pumped from the heart and around the body, also noting that the blood returns to be re-oxygenated from the air in our lungs. * Use open questions to get students to consider the impact of blood loss, consider what may happen to the breathing rate if there is a reduced amount of blood due to a severe bleed. * S&C: less blood to carry oxygen means you would feel short of breath and so breathing rate would increase | Slide 6 |
| **What do you think?**   * Place students into small groups. Ensure that they understand the difference between a sign and a symptom. The groups must then try to decide what signs and symptoms would be present if they came across a casualty with a severe bleed (can also compare this with a minor bleed for extension activity). * Ask them to think about what they have learned so far regarding anatomy and basic physiology and see how that would relate to a sign or symptom. * S&C: ask them to expand and explain their answers. * You can use paper or wipe boards etc. to get students to state what they think the signs and symptoms of different types of bleed and shock would be. S&C: can you group these into categories? | Slides 7-8 |
| **Bleeding video**   * Explain that students should watch this video about bleeding and shock then be prepared to use information from the video afterwards so watch carefully. * There is an additional video about management of a nosebleed video that is optional to view - it is available at the end of the PowerPoint presentation | Slide 9 |
| **Group activity**   * In small groups, students can answer the questions on A10 about how it would feel and what they think they could do to help someone. * This can be revisited for role play later and answers checked. Consider adding information to a previous list made earlier in session to see what they can now add to previous existing knowledge. * S&C: use of gloves and infection control. | Slides 10-11 |
| **Shock**   * Students should learn what shock is and how it may be caused. Explain that a lack of oxygen can cause damage to the major organs within the body. * Emphasise the signs and symptoms of shock and that this list is not exclusive of others. Students should be able to notice the signs and symptoms of shock and understand how they should respond. | Slide 12 |
| **Your turn**   * You could print out your turn sheets and give students a scenario to manage and administer first aid skills. Use severe and minor bleed scenarios and for S&C consider the casualty may go into shock. * As a teacher you should demonstrate the key steps to deliver first aid to a casualty that is bleeding. Use the key steps to guide your actions or alternatively let the students direct your actions as you follow their instructions. * Students then have a turn and are given a role play scenario. They are told to imagine that they are playing out in the street with a friend. Ask them to pretend that the friend falls over and cuts their arm/leg on a sharp object. * Use key steps to simulate looking after a casualty. Ensure that they remember to firstly make the area safe by removing any hazards to themselves or others, reassure the casualty and use decision making skills and rationale to decide if their casualty needs to seek medical attention. * Teacher to observe and feedback to students. As an option, the student could use peer assessment and score their partners. | Slides 13 – 15, your turn sheet |

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| **Optional Activity** | |
| **Activity** | **Resources required** |
| **Make a stethoscope**   * Follow steps to make a simple stethoscope. Use this to listen to each other’s hearts before and after exercise – what changes? * Learn how a real stethoscope works and why doctors use it. | Slide 20, optional activity sheet A11 - stethoscope |
| **Maths pie chart**   * Colour sheet provided to allow students to complete pie chart of the different elements of blood we have looked at in this session. | Slide 18, optional activity sheet A7– maths pie chart |

**6. Check learning**

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| * Check that the learning outcomes of the session are met using slide 16. * Ask open questions about safety, bleeding, signs and symptoms and complications. * Students to think of a question to ask their peers about bleeding and create a class quiz. * What have you learned today? * Score yourself - how confident would you now be if you came across someone that was bleeding after an accident? |

**7. Details of assessment for learning**

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| * Shared learning objectives * Peer assessment * Written feedback | * Question/answer * Self-assessment * Reflection/evaluation | * Extended question/answer * Oral feedback * Group work |

**8. Teacher notes**

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| **Use this space for differentiation notes, the role of any classroom support, evaluation notes, etc.** |

**9. Curriculum links**

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