**Unit 1 Extended response questions worksheet 1 - Exercise 1**

| NCFE Level 1/2 Technical Award in Engineering: Unit 1 | | | |
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| First Name: |  | Surname: |  |

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| Question |
| You work as an Oil and Gas Chemical Engineer for a petroleum Engineering Company. Your job involves in the process of extracting oil and natural gas from reservoirs.  As part of your role you must follow safety procedures and meeting standards which includes adhering to the COSHH regulations.  Discuss the importance of COSHH in a chemical engineering environment and analyse the possible impact of not adhering to the COSHH regulations.  **[9 marks]** |
| Tips: |
| Tips  1) In the exam you are expected to demonstrate the 3 following assessment objectives:   * AO1, Recalling knowledge and understanding * AO2, Apply knowledge and understanding * AO3, Analyse/evaluate knowledge and understanding.   2) Look for the **key action words** in the question to guide you with how you should respond to the question.   * **Discuss (to talk about)** the importance of COSHH in a chemical engineering environment * **Analyse (examine)** the possible impact of not adhering to the COSHH regulations.   3) As a general rule you should look to **demonstrate** the following in your answer.   * Try to demonstrate a wide range of knowledge and understanding on the topic (COSHH) * Ensure your answer is accurate and detailed * Use subject specific terminology in your answer * Make sure what you write is relevant and in context to the question you are answering * Analysis and evaluation are present and effective * Your conclusions are supported by justification. |

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| **Activity 1 Recall Knowledge** |
| To demonstrate a **wide range** of subject knowledge, look back at the question and identify what knowledge you are being asked to recall.  The knowledge you are required to recall refers to the chemical engineering environment and COSHH regulations.  Recall what you know and understand about the following two key points using the prompt questions below.  What do you know about the Chemical engineering environment?  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  What are COSHH regulations?  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………… |

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| **Activity 2 Demonstrate understanding** |
| You need to **demonstrate** you understand why the COSHH regulations are in place within the chemical engineering environment to keep the workforce safe.  Why do you think the government put in place COSHH regulations for companies to follow?  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………… |
| **Activity 3 Applying knowledge** |
| To **apply** the knowledge you are now going to discuss why COSHH is important in a chemical engineering environment.  What can be the **impact** of not following COSHH regulations on an **employee** in the chemical engineering environment?  Impact  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  Explanation  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  What can be the **impact** of not following COSHH regulations as an **employer** in the chemical engineering environment?  Impact  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  Explanation  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………… |
| **Activity 4 Analysing and Evaluating** |
| Can you identify and explain 2 examples of how COSHH makes the chemical engineering environment a safer place?  Example 1  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  Explanation  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  Example 2  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  Explanation  …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………… |

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| **Activity 5 Planning your answer** |
| **Part 1,** explain what are COSHH regulations.  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  **Part 2,** why is it important to follow COSHH regulations in a chemical engineering environment? Give examples in this section.  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  **Part 3,** what are the possible impacts of not following COSHH regulations?  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  **Part 4,** in your opinion should a Chemical and Gas company be following COSHH regulations? Justify your opinions.  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………… |