



Factual Recall Questions for AQA GCSE Chemistry Unit 8 Chemical Analysis



To accompany the YouTube video:

<https://youtu.be/0cDJeJrz2Pk>

1. What is a pure substance?
2. How can pure substances be identified?
3. What is a formulation?
4. Give seven examples of formulations
5. What is the purpose of chromatography?
6. What is meant by the stationary phase?
7. What is meant by the mobile phase?
8. What property is used to separate substances in chromatography?
9. What is an R_f value?
10. How is an R_f value calculated?
11. Do the R_f values of a compound change in different solvents?
12. What will the chromatogram of a pure substance look like?
13. Describe how paper chromatography can be used to separate mixtures
14. Describe how you could analyse a chromatogram
15. Describe the test for hydrogen
16. Describe the test for oxygen
17. Describe the test for chlorine
18. Describe the test for carbon dioxide

TRIPLE ONLY

19. What type of material can be tested for with a flame test?
20. Describe how to carry out a flame test
21. Explain why a flame test cannot identify mixtures of ions
22. Identify the colours produced by flame tests for compounds containing lithium, sodium, potassium, calcium and copper
23. How else could metal ions be identified
24. Describe how this test is carried out
25. What is the output of this test?
26. Give three advantages of instrumental methods compared to chemical tests
27. Describe how solutions of aluminium, calcium, magnesium, copper (II) ions, iron (II) ions and iron (III) ions could be distinguished
28. Describe the results of the test in Q27
29. Write a balanced equation for the reaction of calcium described in Q27
30. Describe the test for carbonate ions
31. What is the positive result for this test?
32. Describe the test for halide ions
33. Why is acid added before the test?
34. Why is nitric acid used, not hydrochloric acid?
35. What is the positive test for chloride ions, bromide ions and iodide ions?
36. Why is there no result for fluoride ions?
37. Describe the test for sulfate ions
38. Why is dilute hydrochloric acid used first?
39. Why would sulfuric acid not be appropriate?