#### What are the components of a Network?  What distinguishes different types of Network Devices?

What Network devices do you have at your home?

How would you define a home router?  Is it a Wireless Access Point?  Is it a Switch?  Is it a Router?  What other roles can your home router fulfil?

What is the purpose of the OSI model?

What are the layers of the OSI model & what is each layer's function?

How does the TCP/IP model relate to the OSI model?

Can you write the OSI layers from memory?

Program a random number generator. between 1-7.. or roll a die, whatever number it lands on, and describe the name and function of that layer.

What TCP/IP layers are the same in both the OSI and TCP/IP models?  Which layers are different?

Why do computers use binary numbers?  Aren't decimal numbers more logical?

What is 1010 0010 in decimal?

What is 204 in binary?

Binary Conversion Practice Questions  
These questions are based on slides from the first Network Admin lecture presentation  
1. What is 00010100 in decimal? 20   
2. What is 00101010 in decimal? 42  
3. What is 01011110 in decimal? 94  
4. What is 10000011 in decimal? 131  
5. What is 11111001 in decimal? 249  
6. What is 32 in binary? 00100000  
7. What is 68 in binary? 01000100  
8. What is 100 in binary? 01100100  
9. What is 129 in binary? 10000001  
10. What is 253 in binary? 11111101  
11. What is 0001 1000 in hexadecimal? 18  
12. What is 0010 1010 in hexadecimal? 2A  
13. What is 0011 1101 in hexadecimal? 3D  
14. What is 1000 0010 in hexadecimal? 82  
15. What is 1111 1100 in hexadecimal? FC  
16. What is 19 in hexadecimal? 13  
17. What is 38 in hexadecimal? 26  
18. What is 109 in hexadecimal? 6D