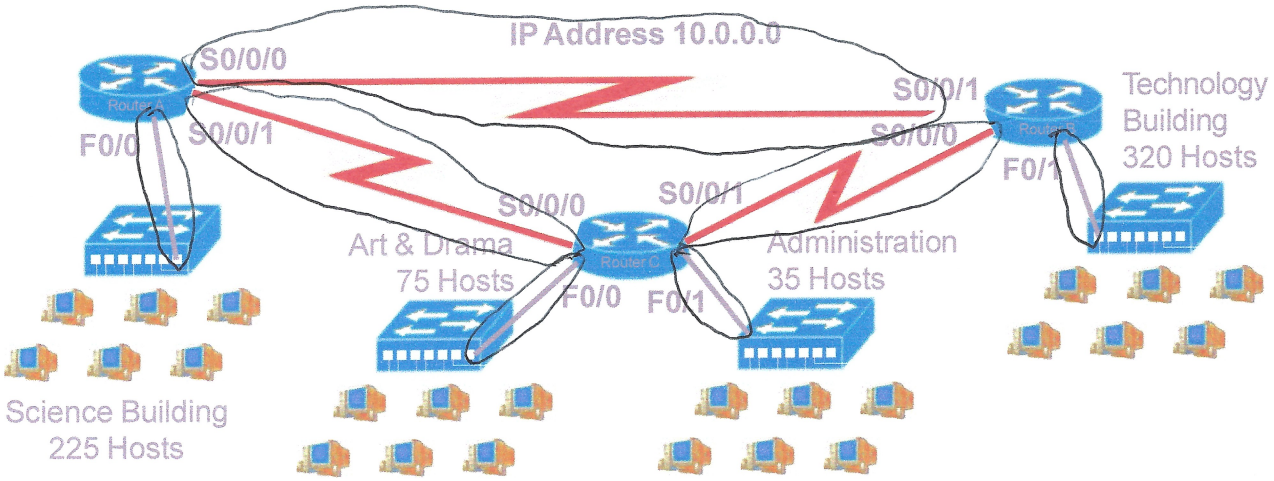
Practical Subnetting 6

Based on the information in the graphic shown, design a network addressing scheme that will supply the **minimum number of subnets**, and allow enough extra subnets and hosts for 20% growth in all areas. Circle each subnet on the graphic and answer the questions below.



Address class A

Custom subnet mask 10.

Minimum number of subnets needed 7

Extra subnets required for 20% growth + 2
(Round up to the next whole number)

Total number of subnets needed = 9

Start with the first subnet and arrange your sub-networks from the largest group to the smallest.

IP address range for Technology 10.0.0.0 to 10.15.255.255

IP address range for Science 10.15.0.0 to 10.31.255.255

IP address range for Arts & Drama 10.32.0.0 to 10.47.255.255

IP Address range Administration 10.48.0.0 to 10.63.255.255

IP address range for Router A to Router B serial connection 10.64.00 to 10.79.255.255

IP address range for Router A to Router C serial connection 10.80.0.0 to 10.95.255.255

IP address range for Router B to Router C serial connection 10.96.00 to 10.111.255.255