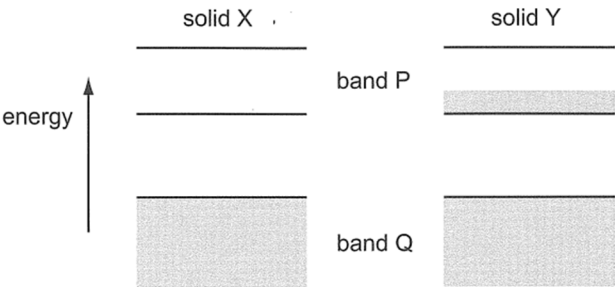


38 The diagram illustrates the upper energy bands in two different classes of solid at absolute zero. The shaded areas represent occupied electron energy levels.



What are bands P and Q, and what are the classes X and Y of the solids?

	band P	band Q	solid X	solid Y
A	conduction	valence	intrinsic semiconductor	metal
B	conduction	valence	metal	intrinsic semiconductor
C	valence	conduction	intrinsic semiconductor	metal
D	valence	conduction	metal	intrinsic semiconductor