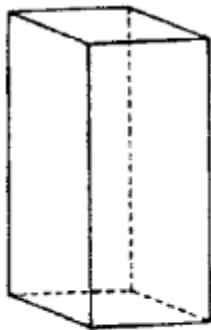




UNIVERSIDADE FEDERAL DO PARANÁ  
Dep. De Química  
Segunda Lista de Exercícios de Introdução à Cristalografia  
(CQ735A)  
Professor: Eduardo Lemos de Sá

1) Determine o grupo de ponto dos seguintes cristais (se você julgar necessário, a Tabela presente no endereço <http://www.quimica.ufpr.br/edulsa/cq735A/pointgroup.pdf> poderá ser usada), indique a posição dos eixos cristalográficos, desene os elementos de simetria e dê o símbolo internacional para o grupo de ponto:



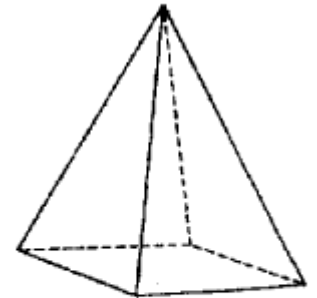
Rhombic  
prism



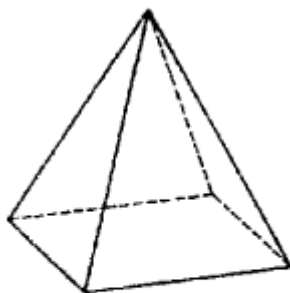
Trigonal  
prism



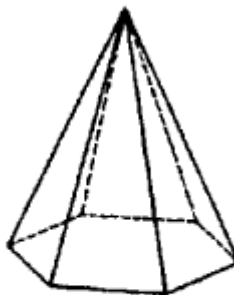
Hexagonal  
prism



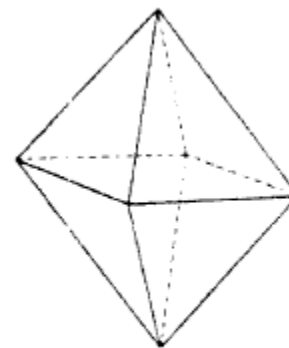
Rhombic  
pyramid



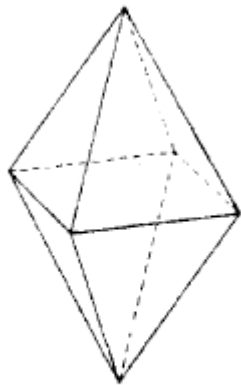
Tetragonal  
pyramid



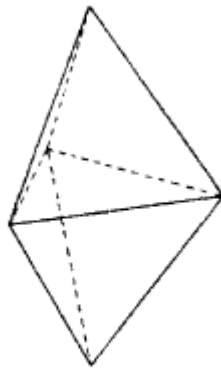
Hexagonal  
pyramid



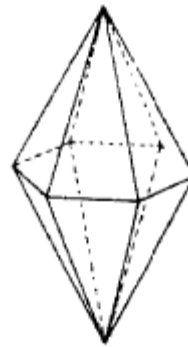
Rhombic  
dipyramid



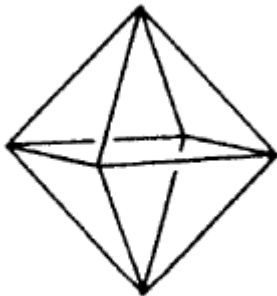
Tetragonal  
dipyramid



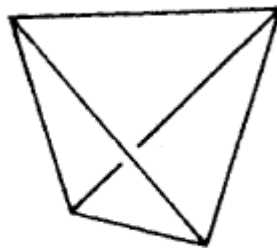
Trigonal  
dipyramid



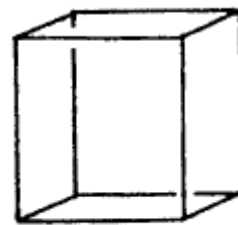
Hexagonal  
dipyramid



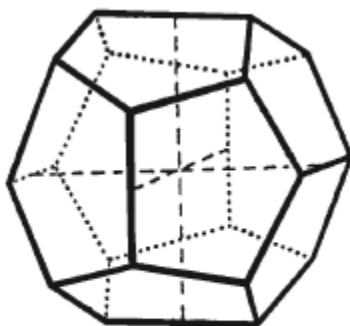
Octahedron



Tetrahedron

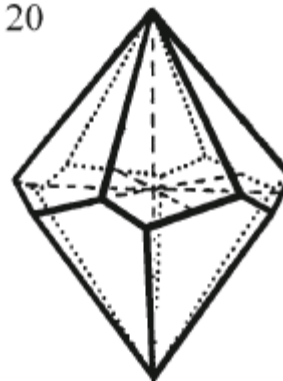


Hexahedron

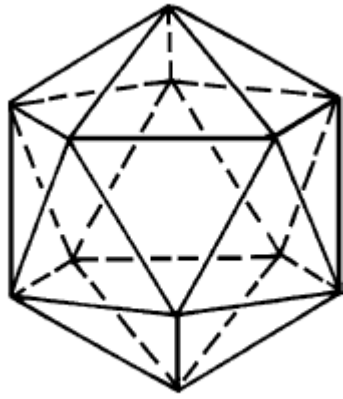


Pentagonal Dodecahedron

20



Hexagonal Trapezohedron



icosahedron

2) Avalie, dentre os sólidos acima, qual(is) dele(s) poderiam apresentar propriedades piro e piezoelétricas. Justifique a sua resposta.

Bom trabalho