

INTRODUCTION

ELEMENTS OF

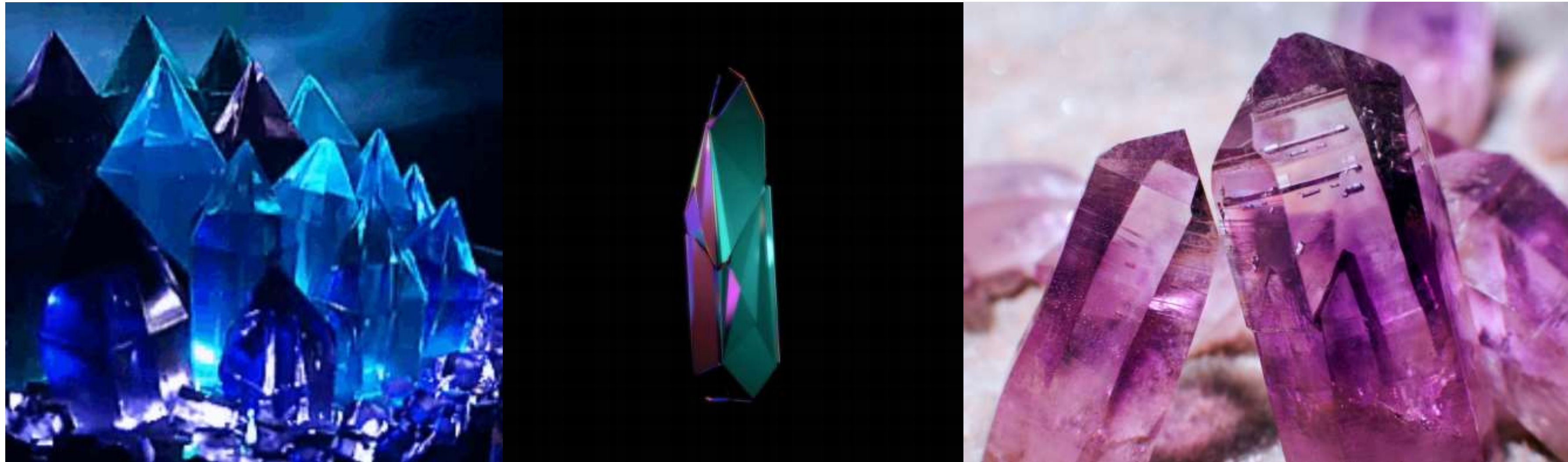
CRYSTAL CRYSTAL

SYMMETRY LAWS OF

SYMMETRY

NATURAL SOLID BODY BOUNDED BY SMOOTH AND PLAIN SURFACE.
ARRANGED IN AN ORDERLY (I.E. GEOMETRICAL) PATTERN , WHICH IS AN

OUTWARD EXPRESSION OF A REGULAR INTERNAL ATOMIC STRUCTURE.



IN THE STUDY OF CRYSTAL , FEW DEFINITE CHARACTER ARE DEFINED.
THESE CHARACTERS ARE:

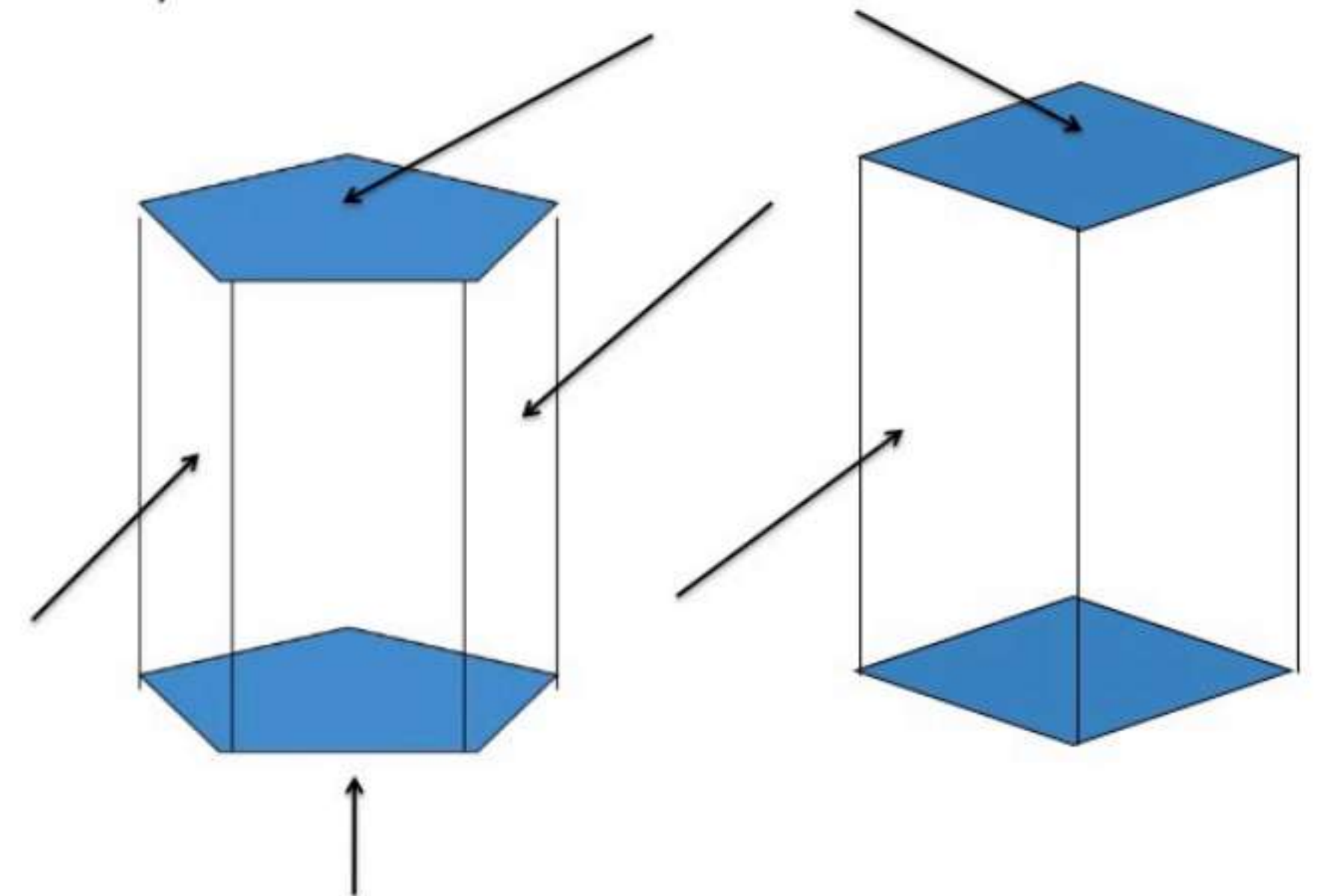
— CRYSTAL FACES

— INTERFACIAL ANGLE

CRYSTAL FACES

—

1. Crystal faces



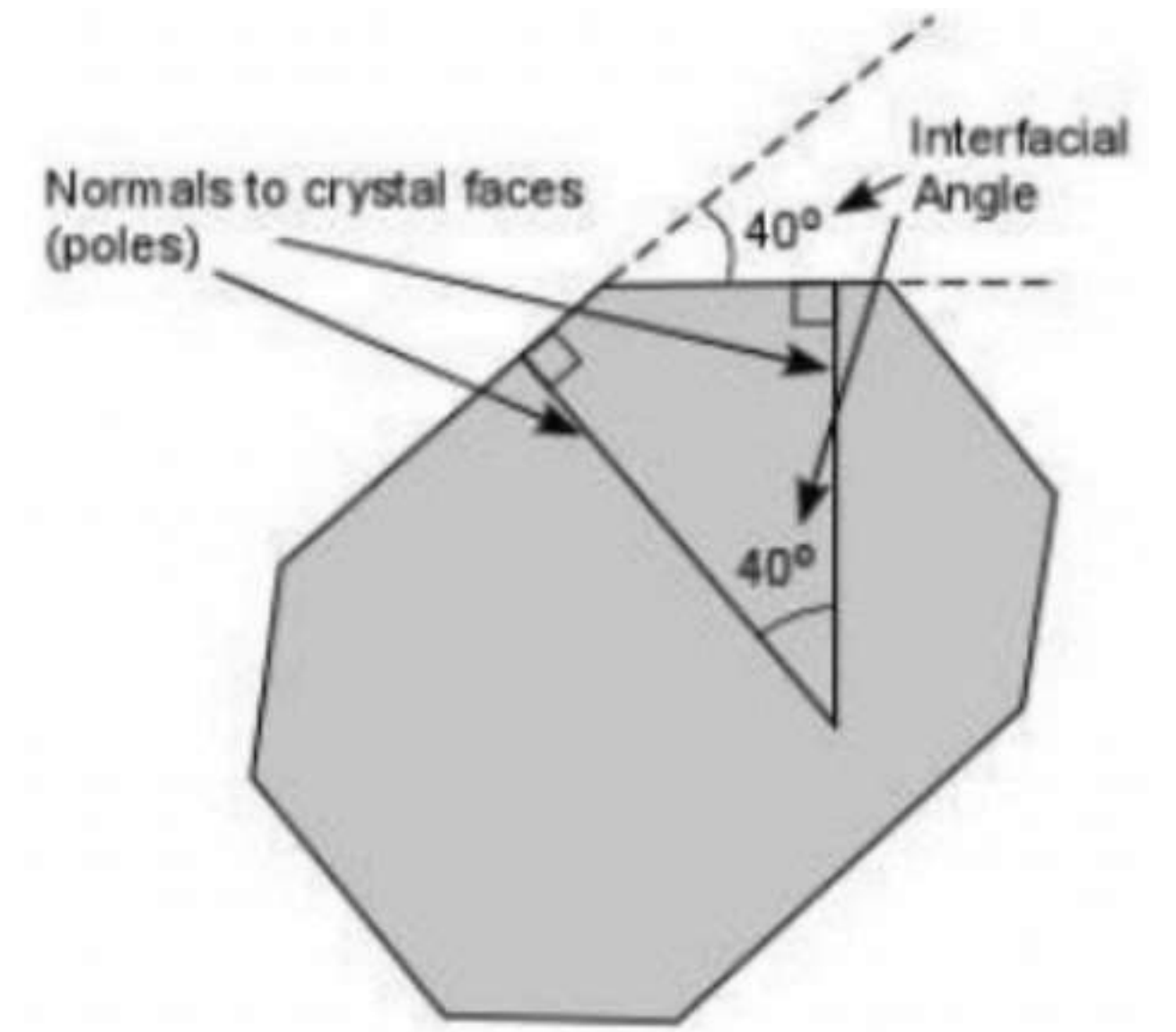
CRYSTAL FACES



INTERFACIAL ANGLE

-

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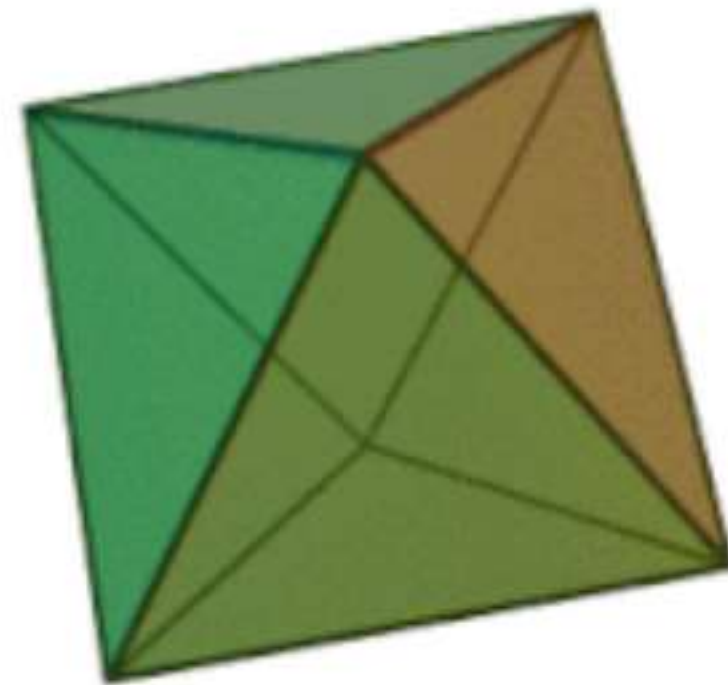


ON THE BASIS OF STRUCTURE OF CRYSTAL, IT CAN BE CLASSIFIED INTO TWO CATEGORIES:

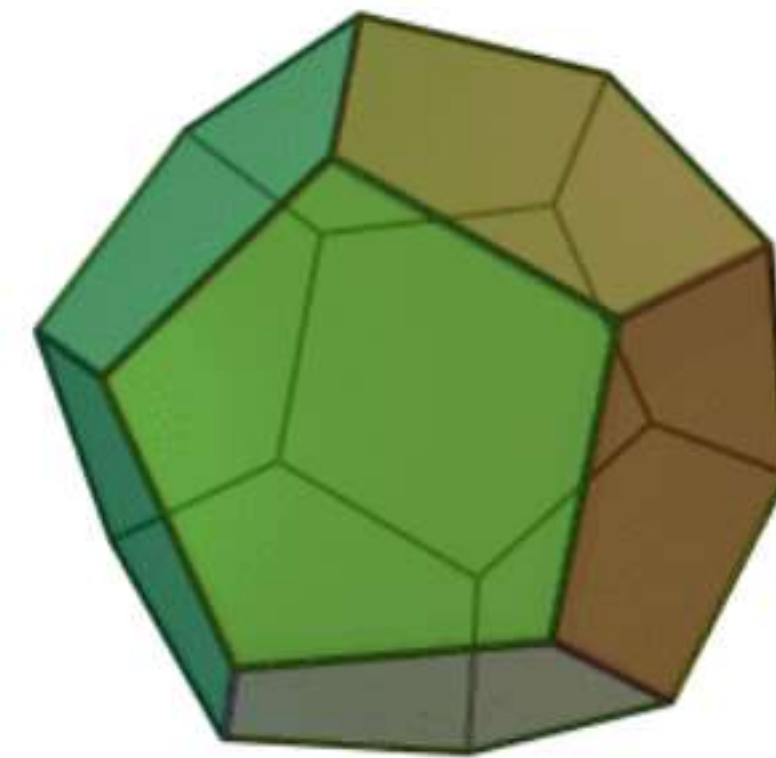
— SIMPLE FORM

COMBINATION FORM

SIMPLE FORM



CUBE



OCTAHEDRON

DODECAHEDRON

COMBINATION FORM



Trapezohedral
Trisoctahedron



Trigonal
Trisoctahedron



Tetrahexahedron



Hexoctahedron

THE FACES, EDGES AND SOLID ANGLES IN CRYSTALS OCCUR WITH SOME REGULARITY. THIS IS KNOWN AS SYMMETRY.

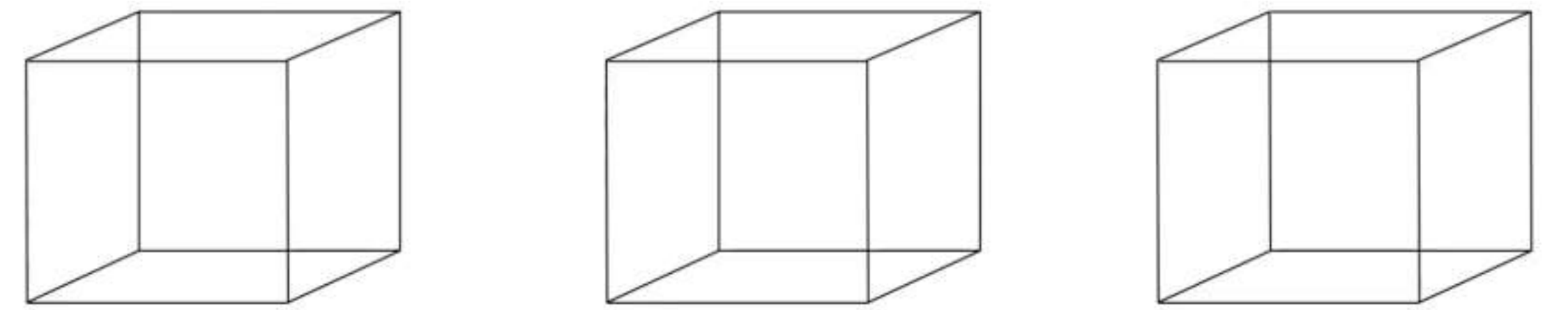
SYMMETRY IS PROPERTY OF FUNDAMENTAL IMPORTANCE FOR A CRYSTAL. IT CAN BE STUDIED WITH REFERENCE TO THREE DIFFERENT CHARACTERS, COMMONLY CALLED ELEMENTS OR LAWS OF SYMMETRY. THESE ARE:

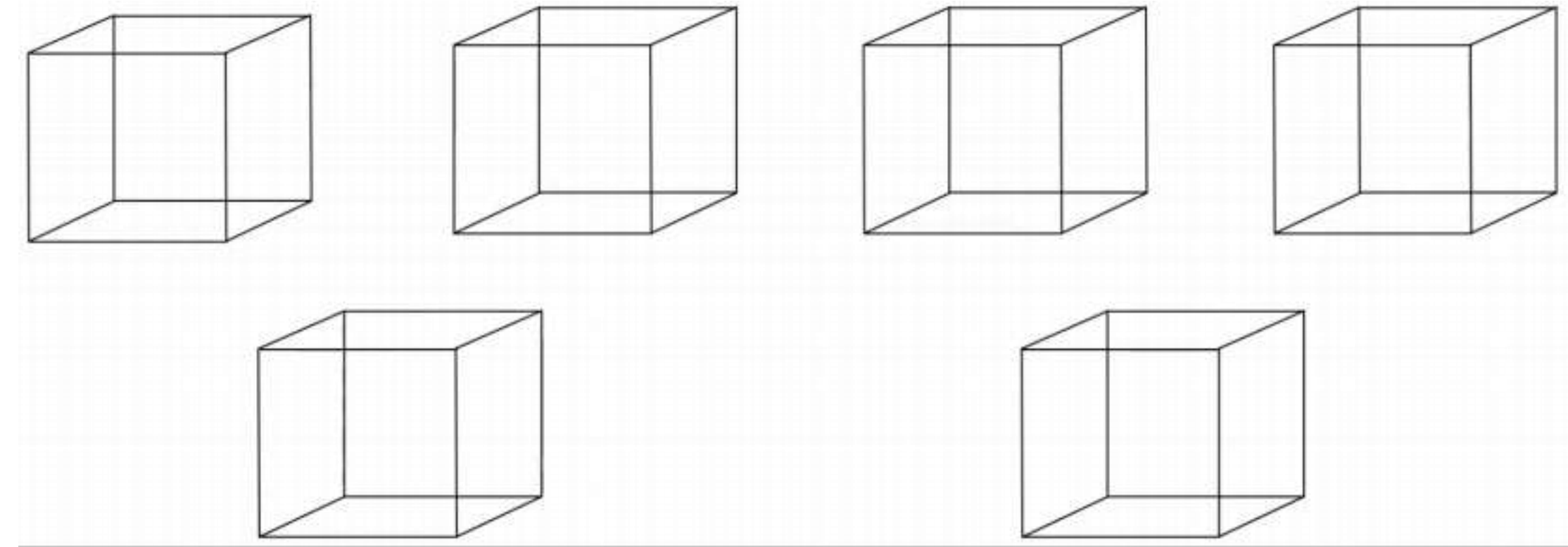
- PLANE OF SYMMETRY

- AXIS OF SYMMETRY

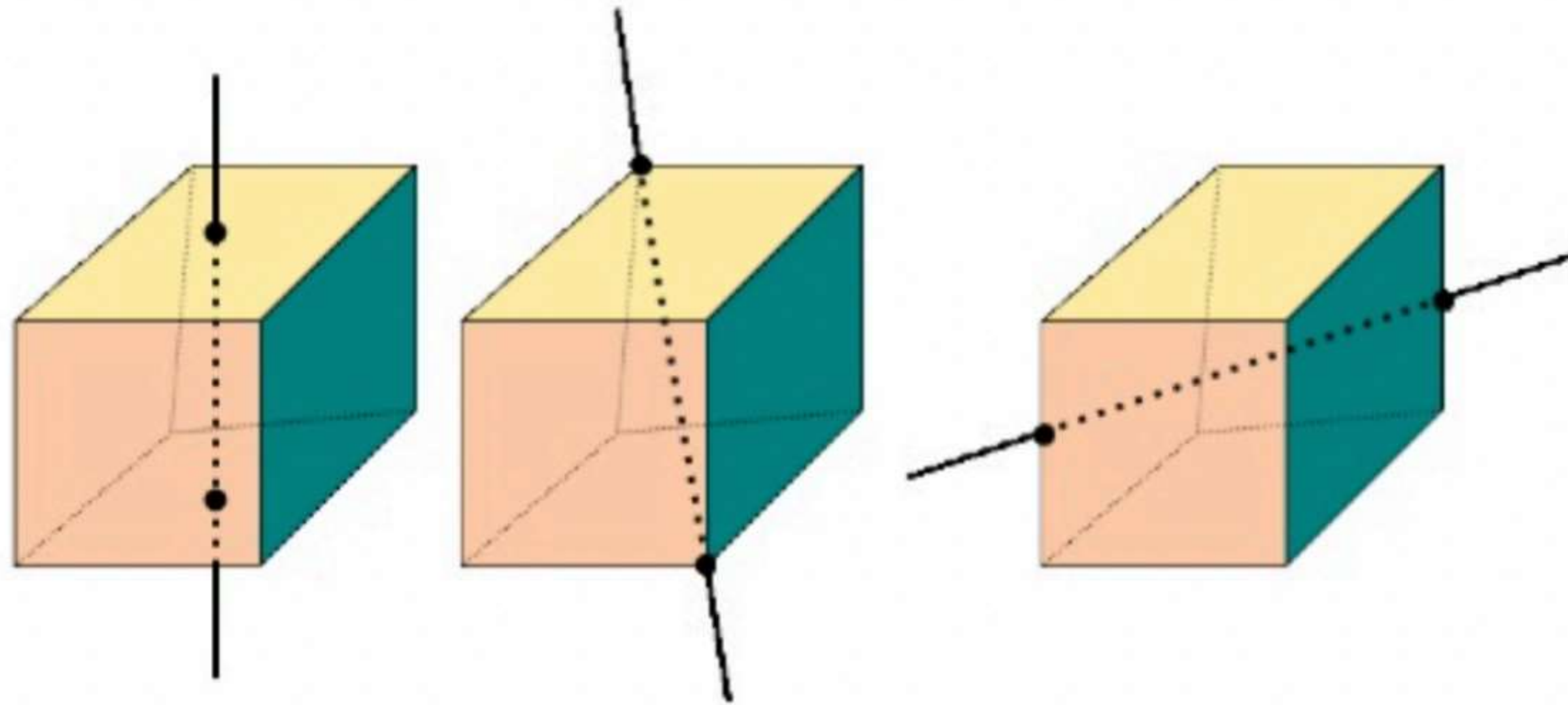
CENTRE OF SYMMETRY

PLANE OF SYMMETRY





AXIS OF SYMMETRY



**CENTRE OF
SYMMETRY**

