

A person wearing a VR headset is interacting with a virtual environment. In the foreground, three large, glowing blue and purple jellyfish are suspended in the air. To the left, a vertical control panel with various icons is visible. The background shows a dimly lit room with large windows and some equipment on a table.

# WORKSHOP PROJECT INDEX

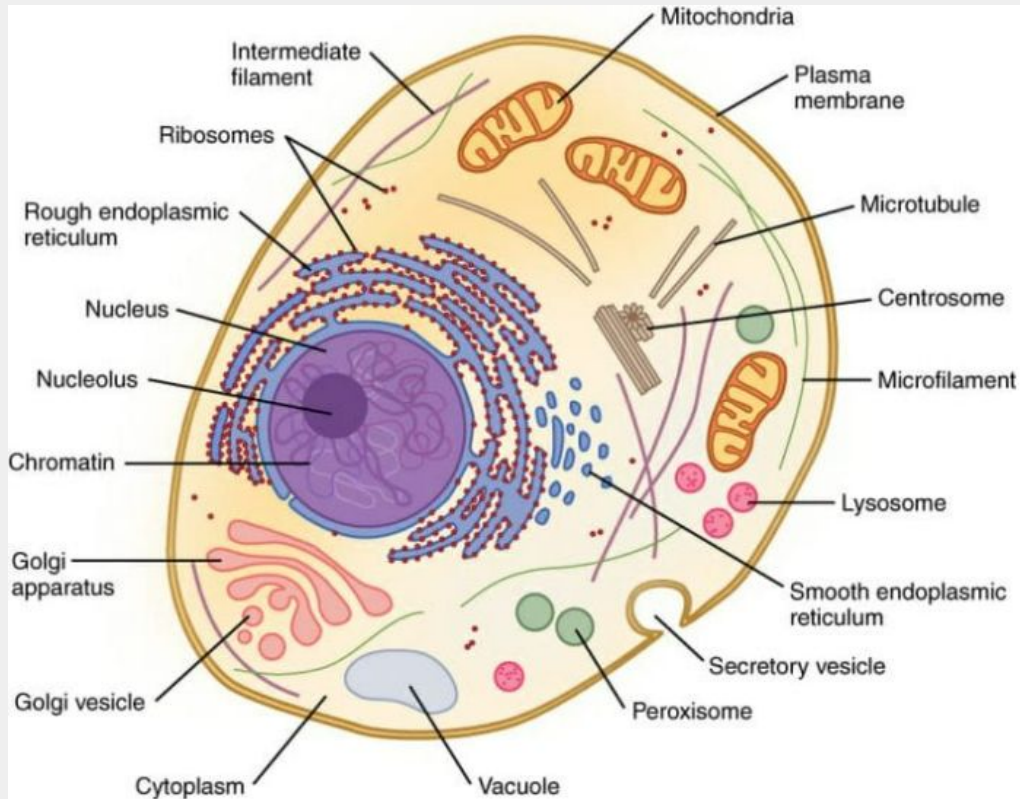
**Perceived**

3D Coding based AR & VR  
Development Workshop

# PerceivED 3D Assets (Grade IX-X)

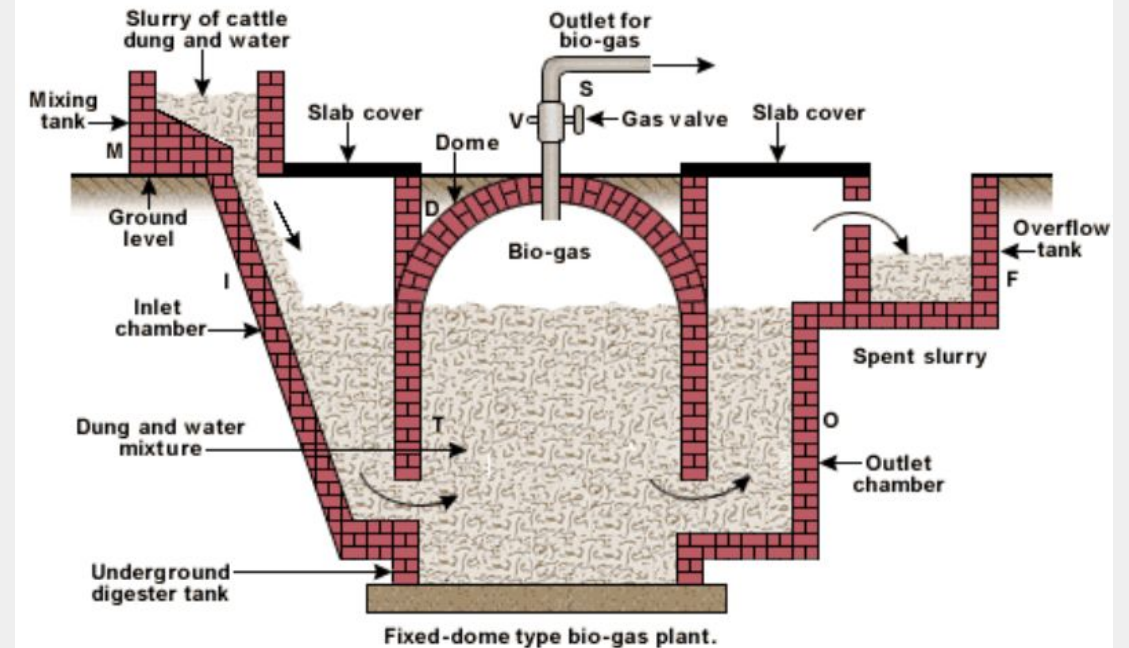
## P1: 3D Cell 3D

### P1M1: Design 3D Organelles of Cell



## P2: 3D Biogas Plant

### P2M1: 3D Fixed Dome Biogas Plant

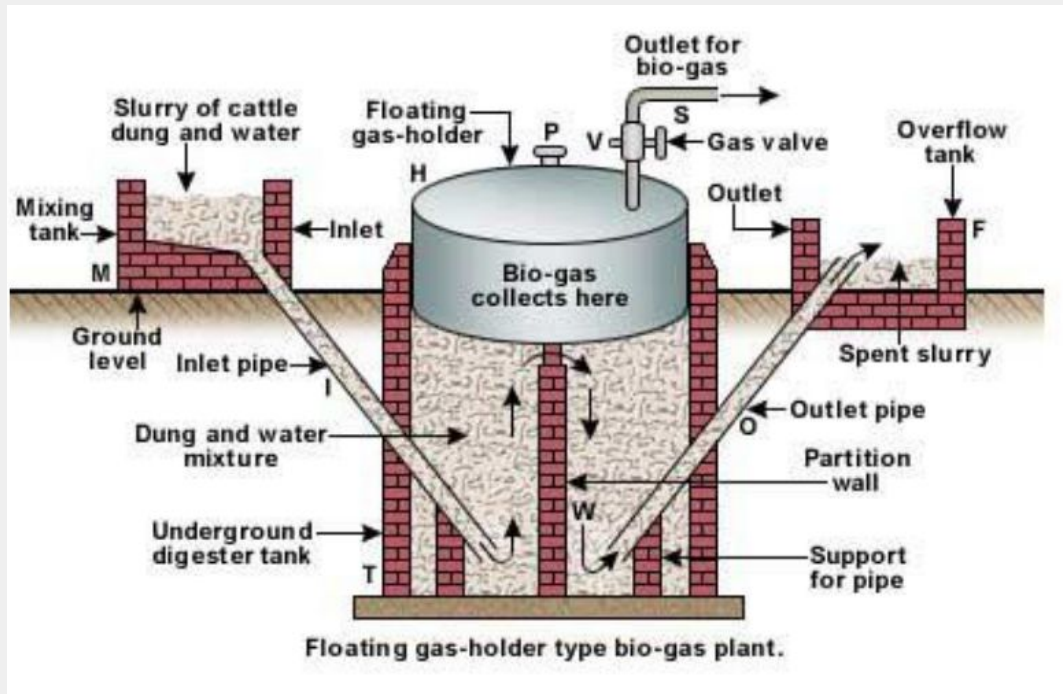




# PerceivED 3D Assets (Grade IX-X)

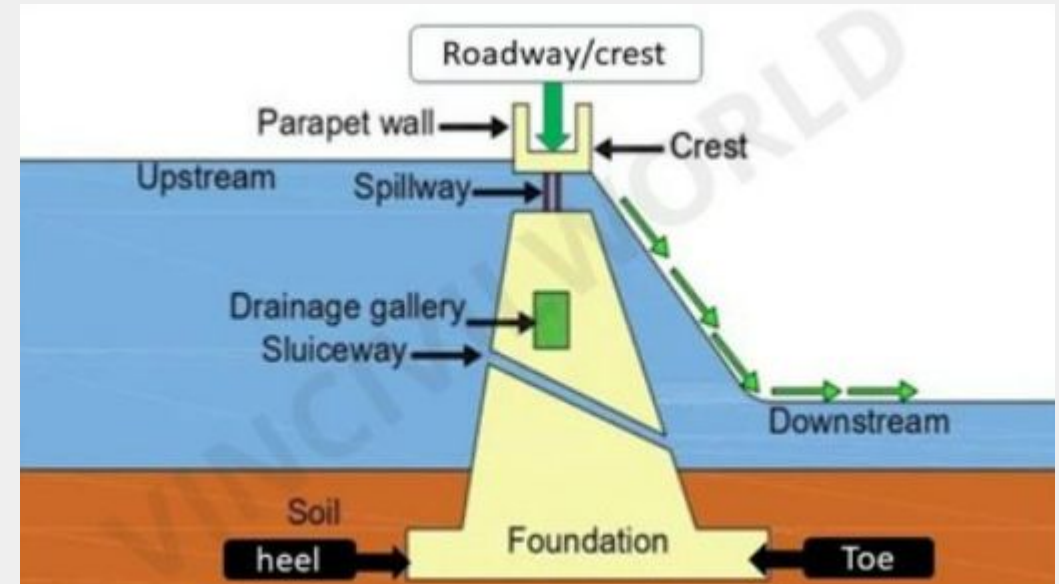
## P2: 3D Biogas Plant

### P2M2: Floating Dome Biogas Plant



## P3: Dam Construction

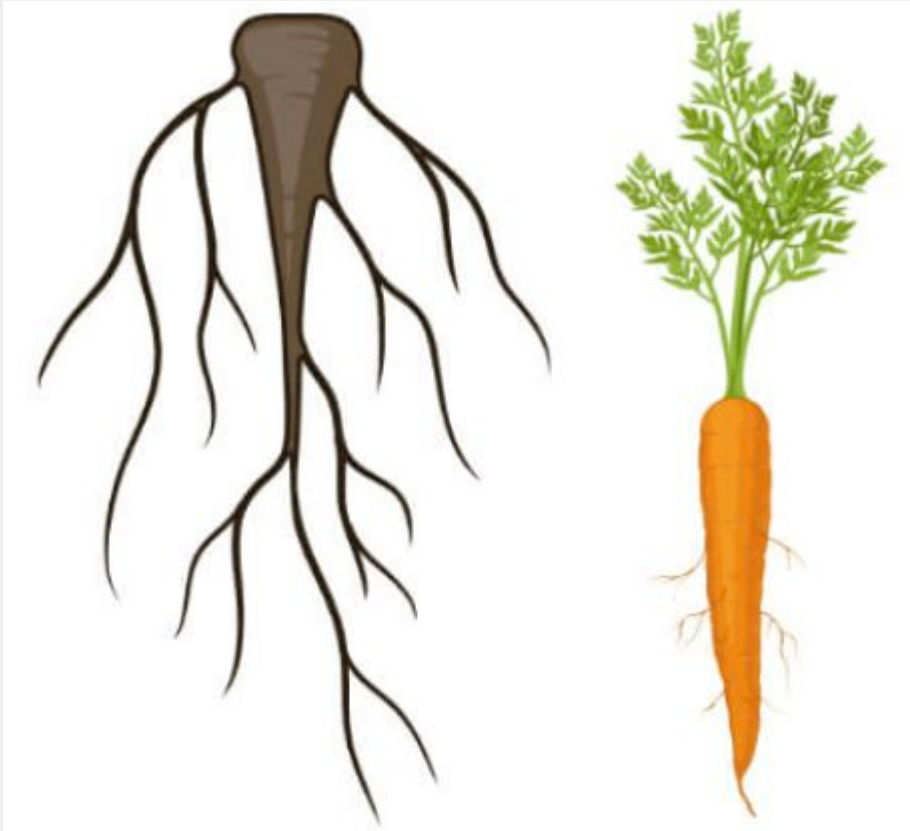
### P3M1: 3D Structure of Dam



# PerceivED 3D Assets (Grade IX-X)

## P4: Types of Root

### P4M1: Tap Root System



## P4: Types of Root

### P4M2: Fibrous Root System

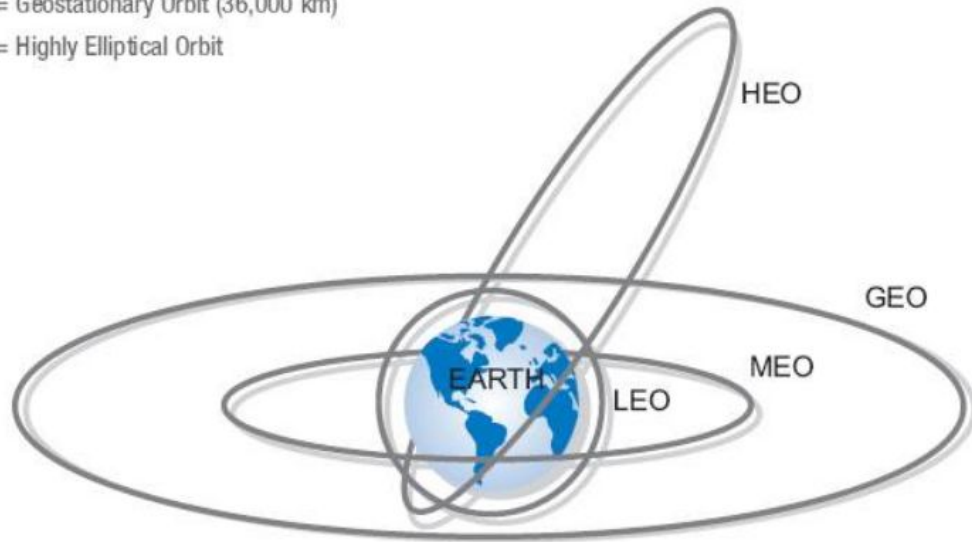


# PerceivED 3D Assets (Grade IX-X)

## P5: Satellite & Eclipse

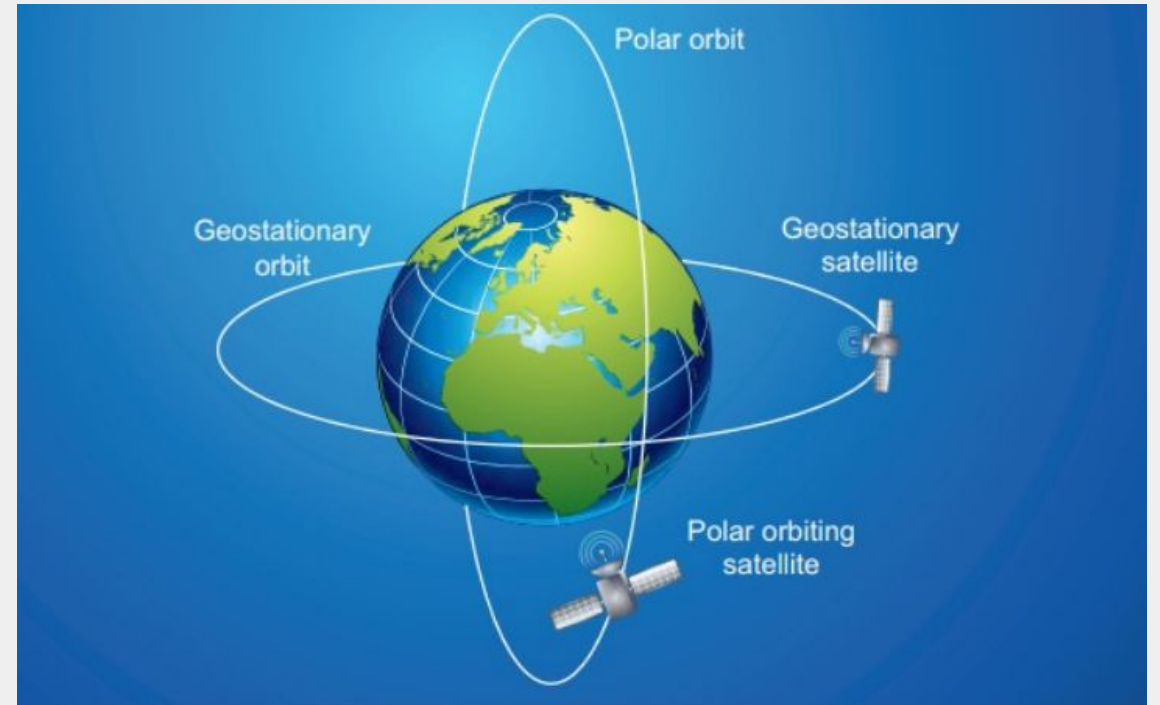
### P5M1: 3D Orbits of Satellite

LEO = Low Earth Orbit (100-1,500 km)  
MEO = Medium Earth Orbit (5,000-10,000 km)  
GEO = Geostationary Orbit (36,000 km)  
HEO = Highly Elliptical Orbit



## P5: Satellite & Eclipse

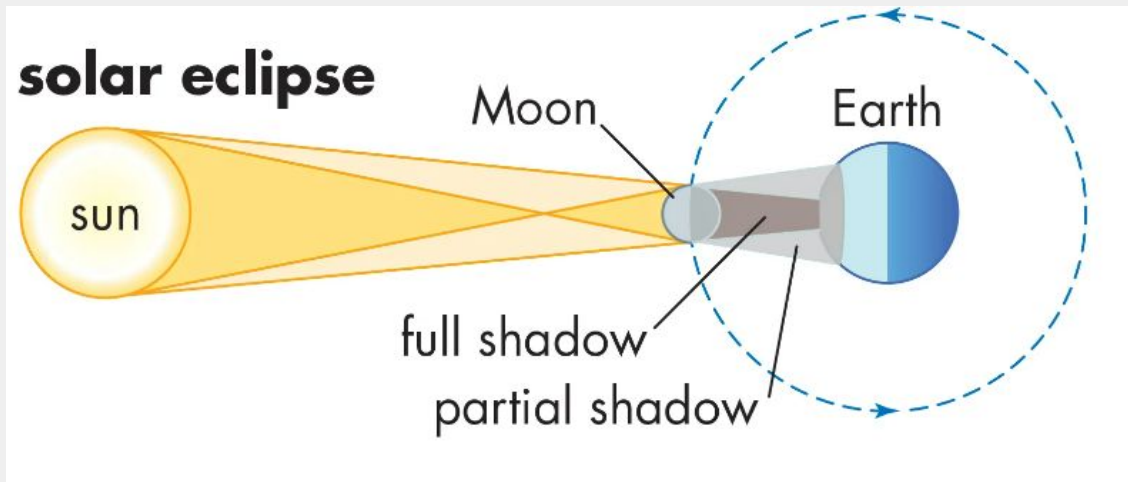
### P5M2: 3D Polar & Geostationary Orbits



# PerceivED 3D Assets (Grade IX-X)

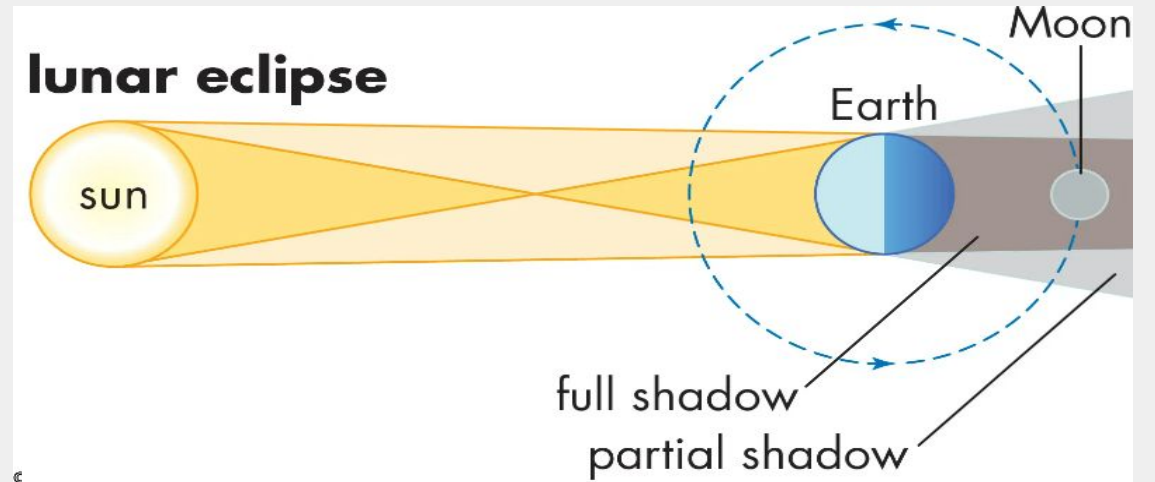
## P5: Satellite & Eclipse

### P5M3: 3D Solar Eclipse



## P5: Satellite & Eclipse

### P5M4: 3D Lunar Eclipse

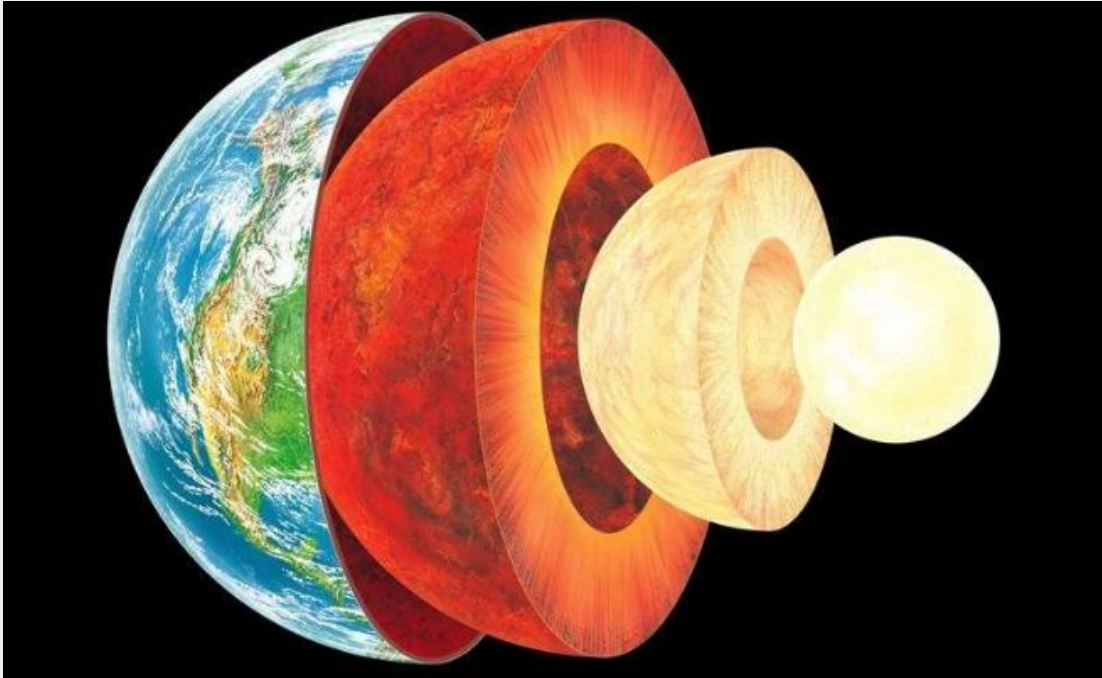




# PerceivED 3D Assets (Grade IX-X)

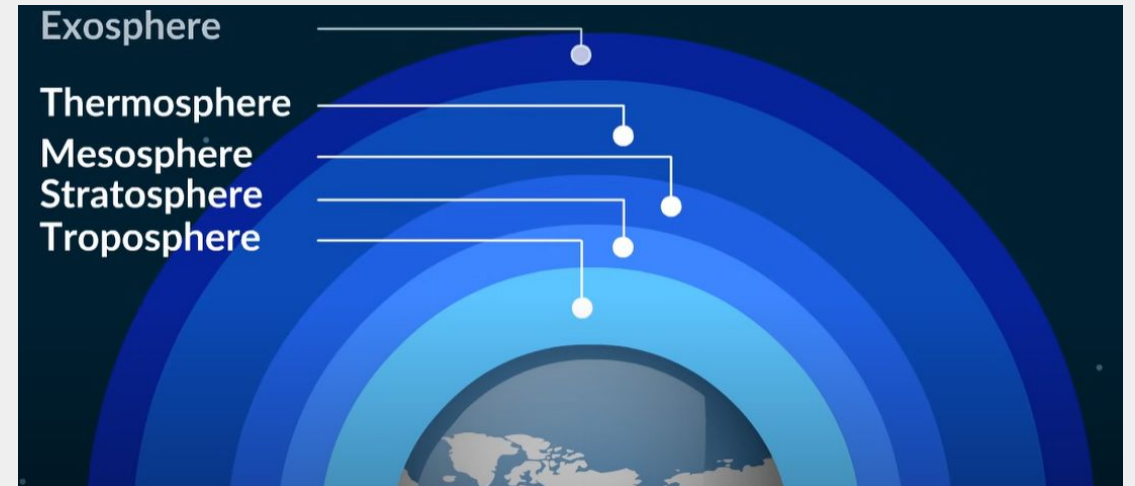
## P6: Atmosphere & Earth

### P6M1: 3D Layers of Earth



## P6: Atmosphere & Earth

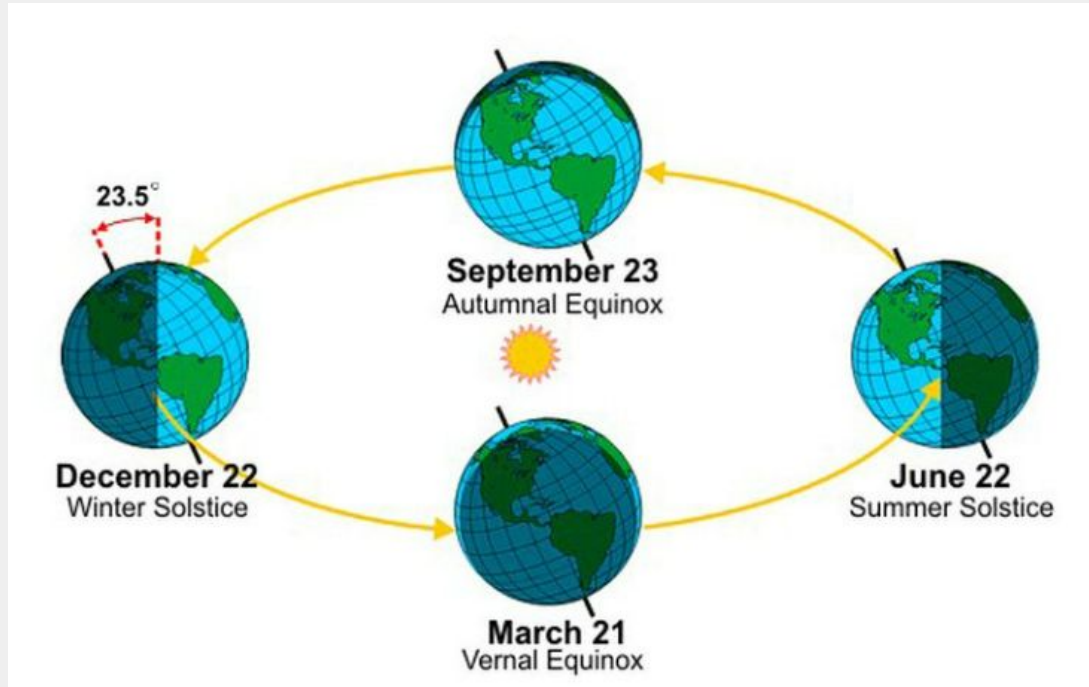
### P6M2: 3D Layers of Atmosphere



# PerceivED 3D Assets (Grade IX-X)

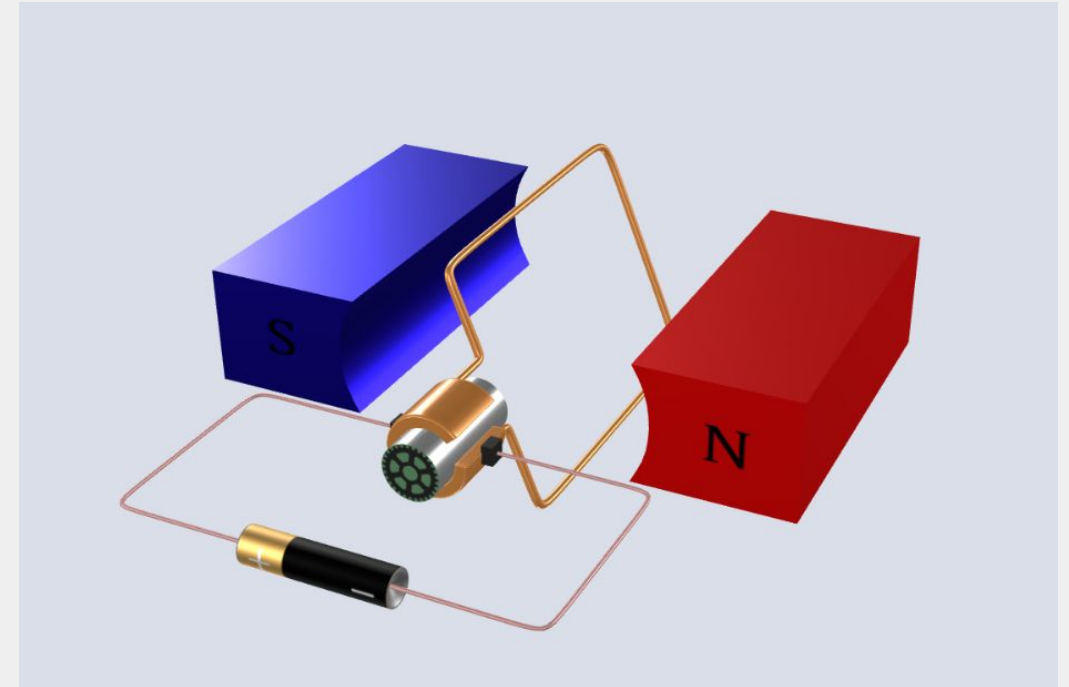
## P7: Season & Tilt of Earth

### P7M1: 3D Tilt of Earth and Seasonality



## P8: Motor & Generator

### P8M1: 3D DC Motor/Generator

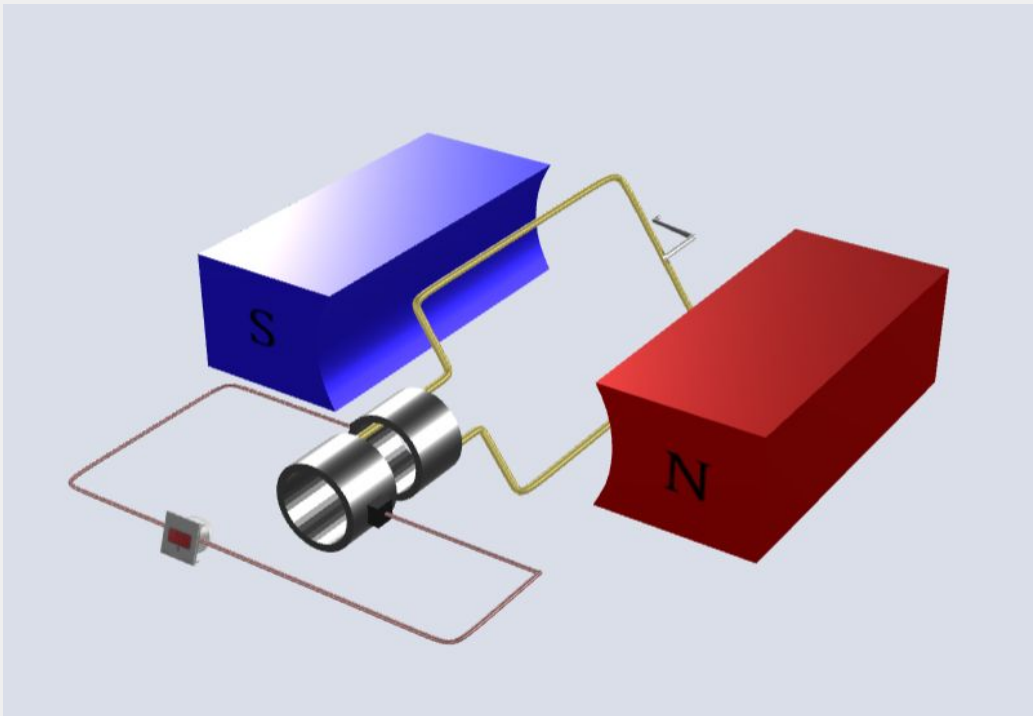




# PerceivED 3D Assets (Grade IX-X)

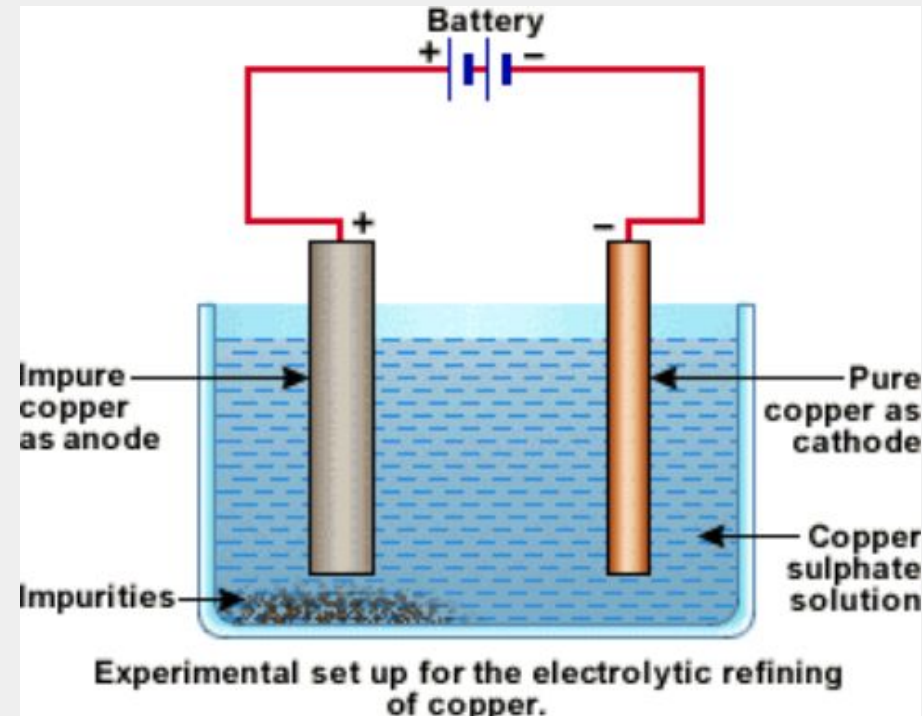
## P8: Motor & Generator

### P8M2: 3D AC Generator



## P9: Electrolysis Setup

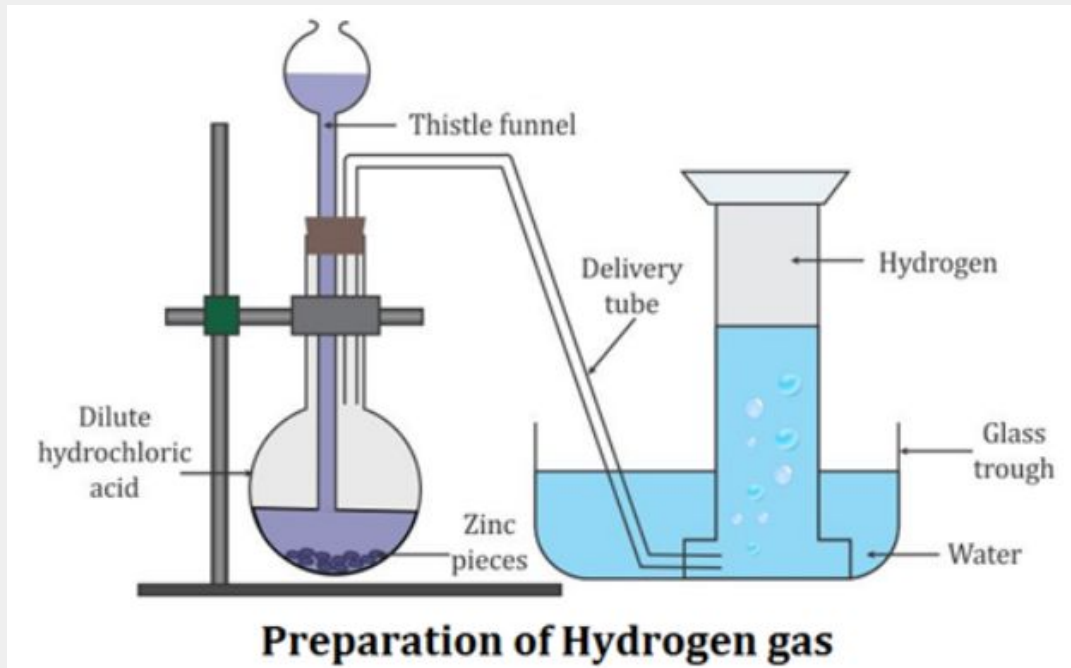
### P9M1: 3D Lab Setup for Electrolysis



# PerceivED 3D Assets (Grade IX-X)

## P10: Hydrogen Formation

P10M1: 3D Lab Setup for Hydrogen Gas formation

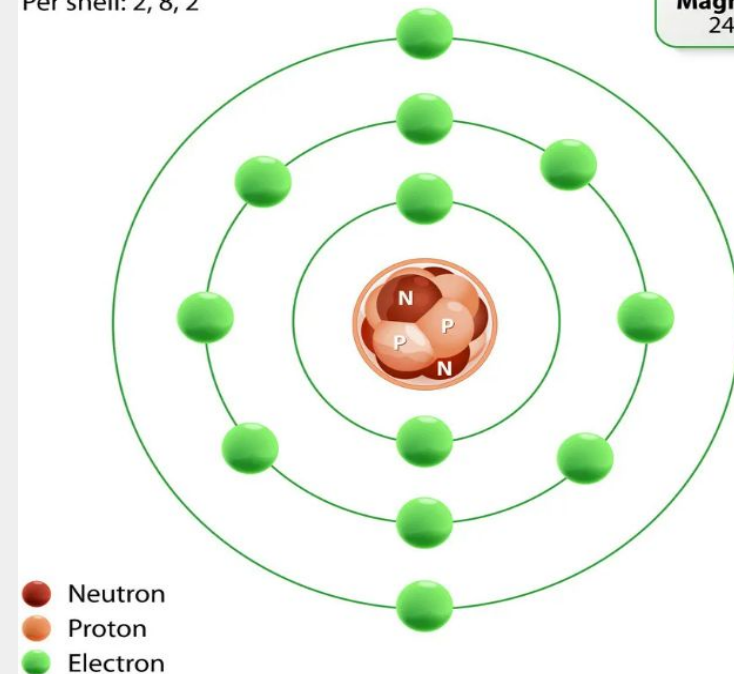
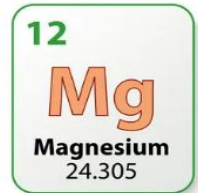


## P11: Atom & Atomicity

P11M1: 3D Magnesium Electronic configuration

### Magnesium

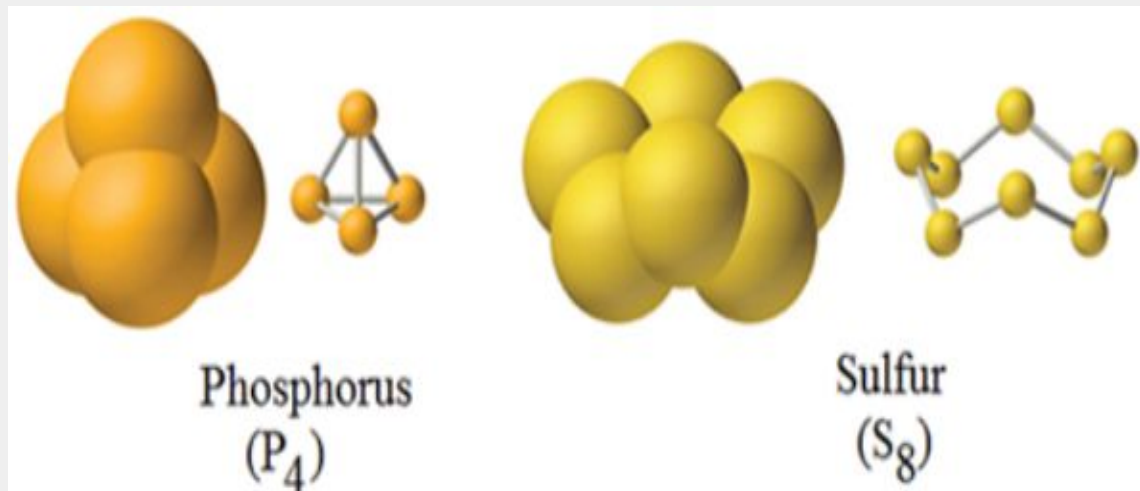
Atomic number: 12  
Atomic weight: 24.305  
Per shell: 2, 8, 2



# PerceivED 3D Assets (Grade IX-X)

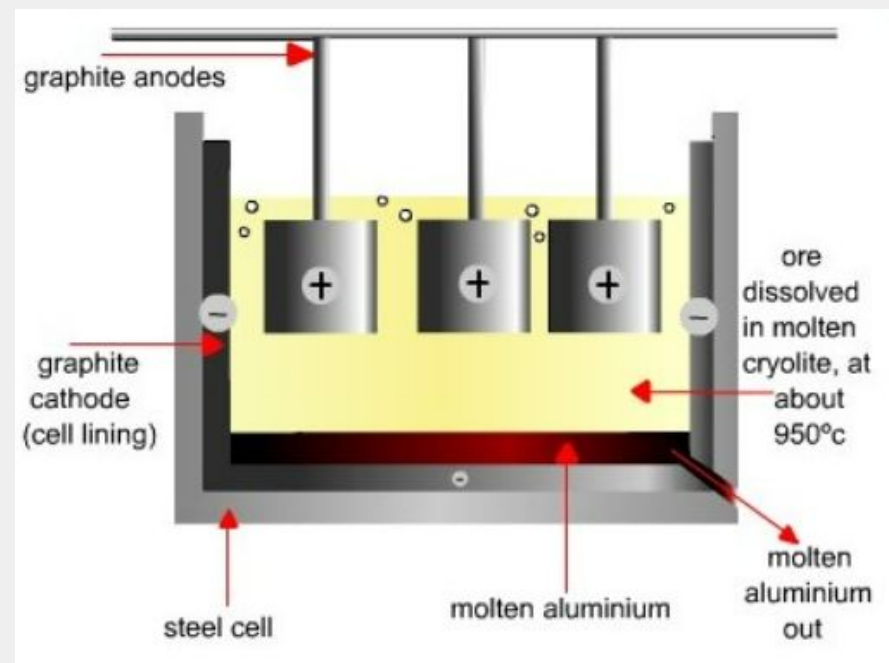
## P11: Atom & Atomicity

P11M2 & P11M3 : 3D Phosphorus (P<sub>4</sub>) & Sulfur (S<sub>8</sub>)



## P12: Aluminium Extraction & Fractional Distillation

P12M1: 3D Setup of Al Extraction

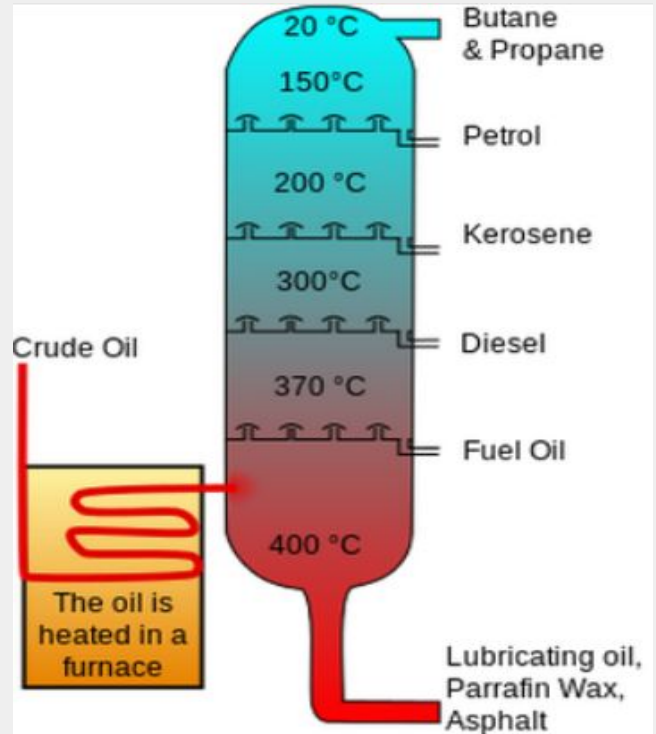




# PerceivED 3D Assets (Grade IX-X)

## P12: Aluminium Extraction & Fractional Distillation

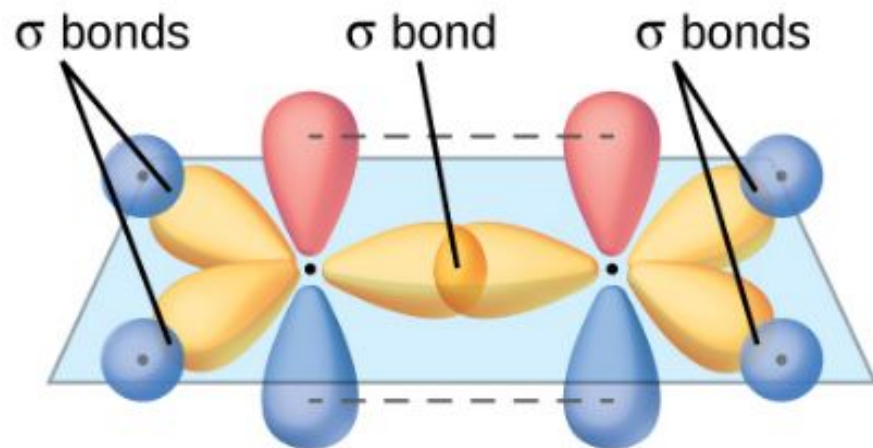
### P12M2 : 3D Fraction Distillation



# PerceivED 3D Assets (Grade XI-XII)

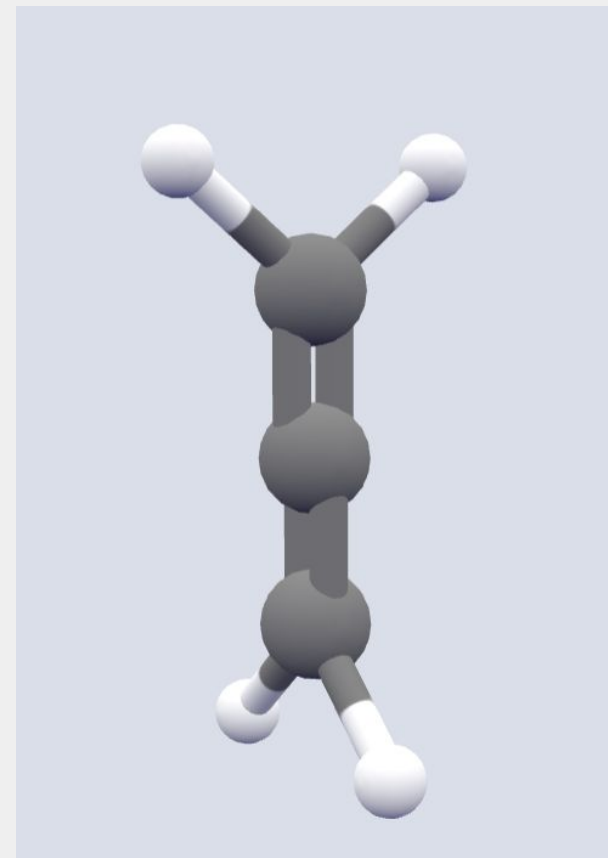
## Q1: 3D Covalent Bond

Q1M1: 3D Sigma & Pi Bond (C<sub>2</sub>H<sub>4</sub>)



## Q1: 3D Covalent Bond

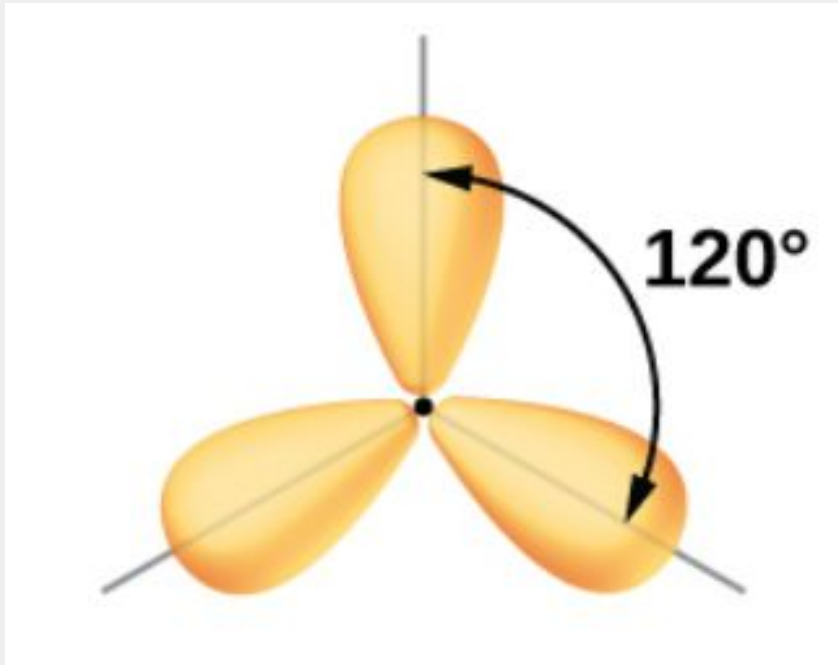
Q1M2: 3D Stick and Ball Allene Molecule



# PerceivED 3D Assets (Grade XI-XII)

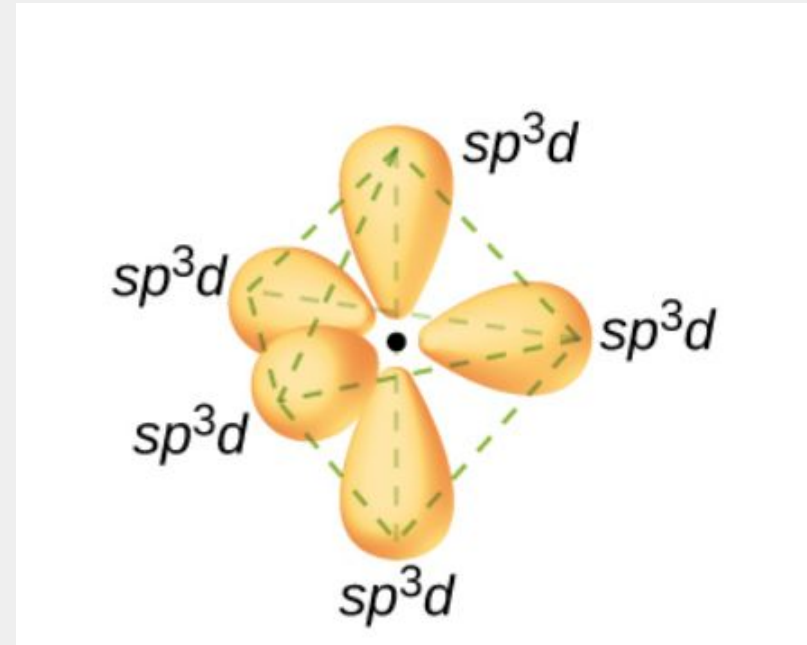
## Q2: 3D Hybridisation

Q2M1: 3D SP<sup>2</sup> Orbital



## Q2: 3D Hybridisation

Q2M2: 3D SP<sup>3</sup>d Orbital

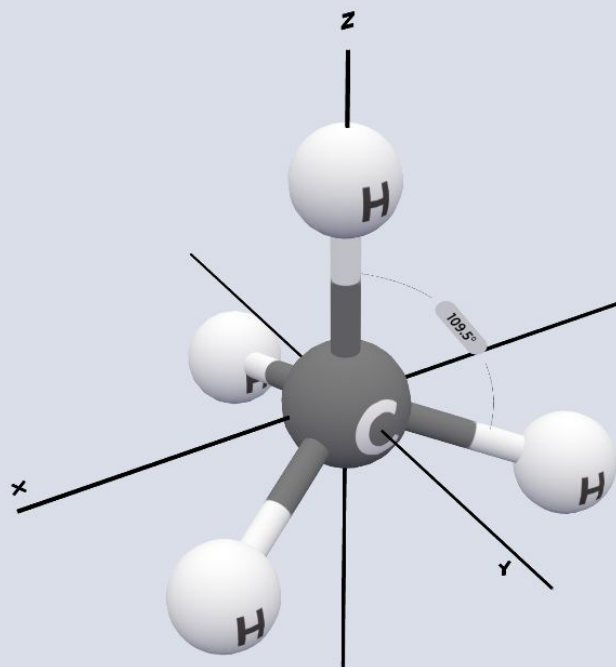




# PerceivED 3D Assets (Grade XI-XII)

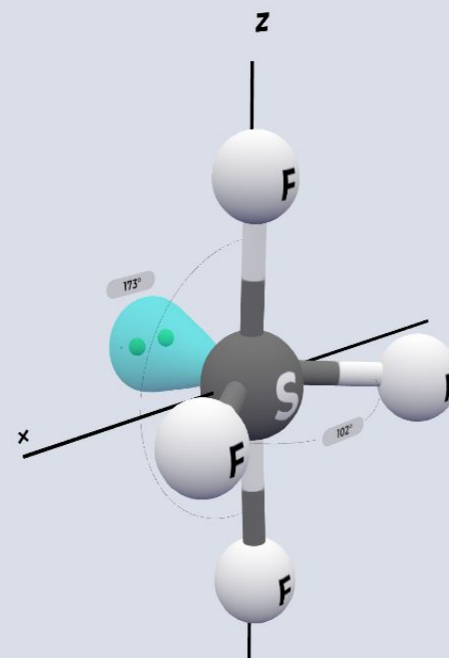
## Q2: 3D Hybridisation

### Q2M3: 3D Methane (CH<sub>4</sub>)



## Q2: 3D Hybridisation

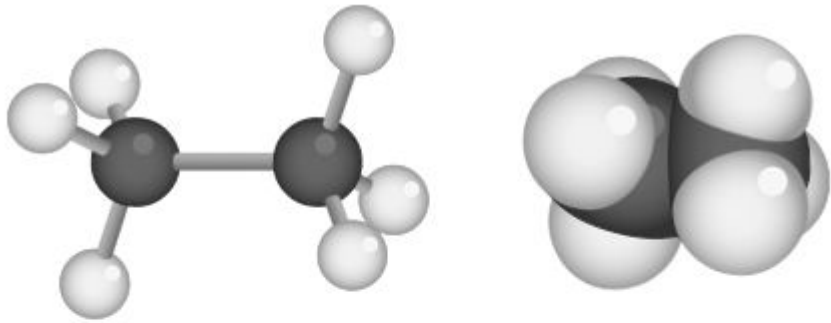
### Q2M4: 3D Sulfur Tetrafluoride (SF<sub>4</sub>)



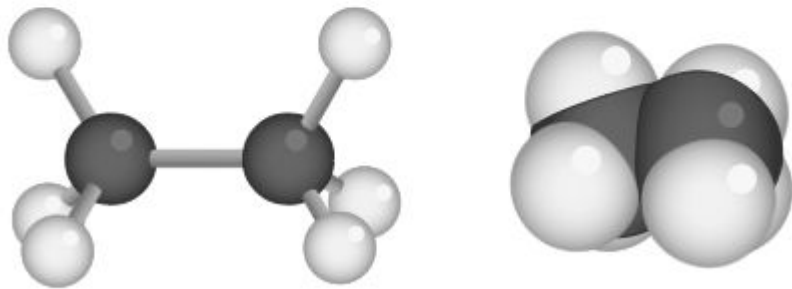
# PerceivED 3D Assets (Grade XI-XII)

## Q3: 3D Ethane Conformer

Q3M1 & Q3M2: 3D Eclipsed & Staggered Ethane Conformer



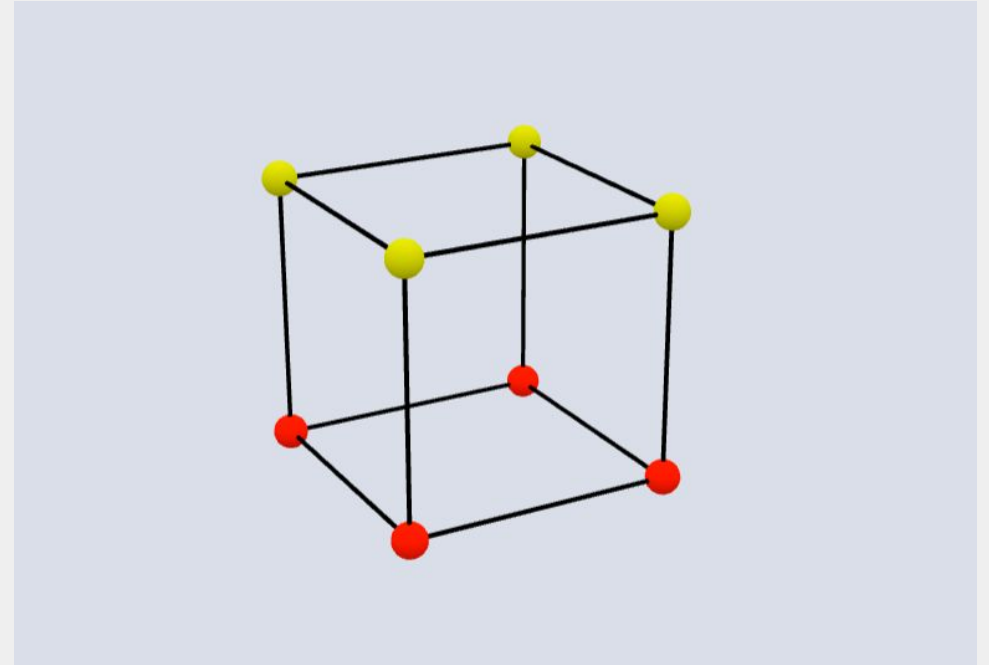
Ethane: Staggered conformation



Ethane: Eclipsed conformation

## Q4: 3D Solid State

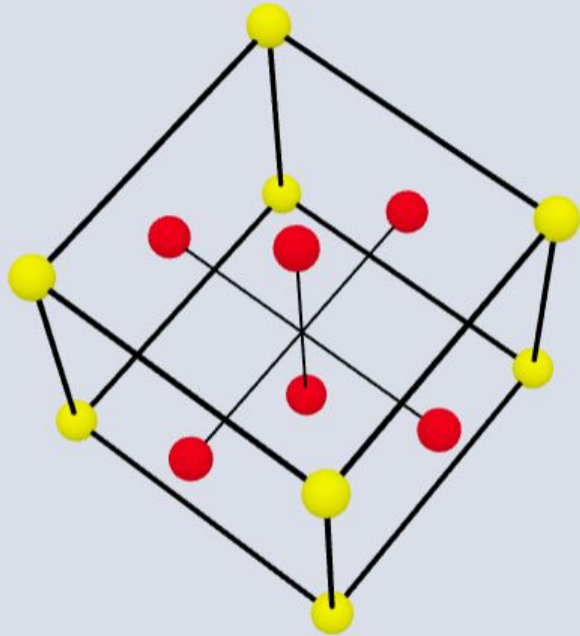
Q4M1: 3D Primitive Cubic Unit Cell



# PerceivED 3D Assets (Grade XI-XII)

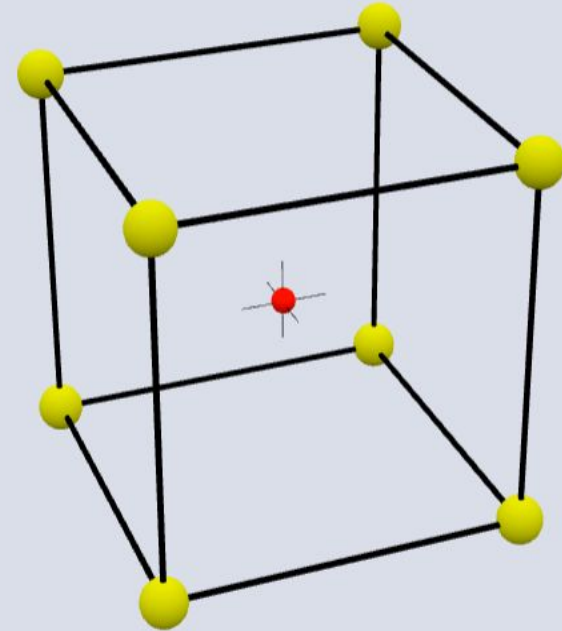
## Q4: 3D Solid State

Q4M2: 3D Face Centered Cubic Unit Cell



## Q4: 3D Solid State

Q4M3: 3D Body Centered Unit Cell

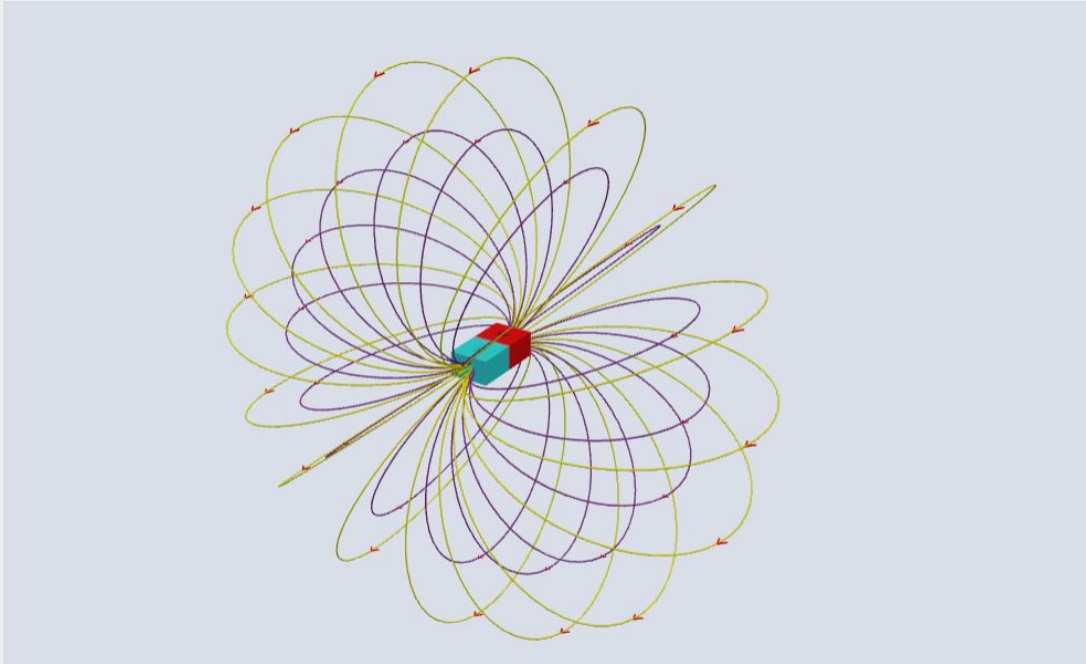




# PerceivED 3D Assets (Grade XI-XII)

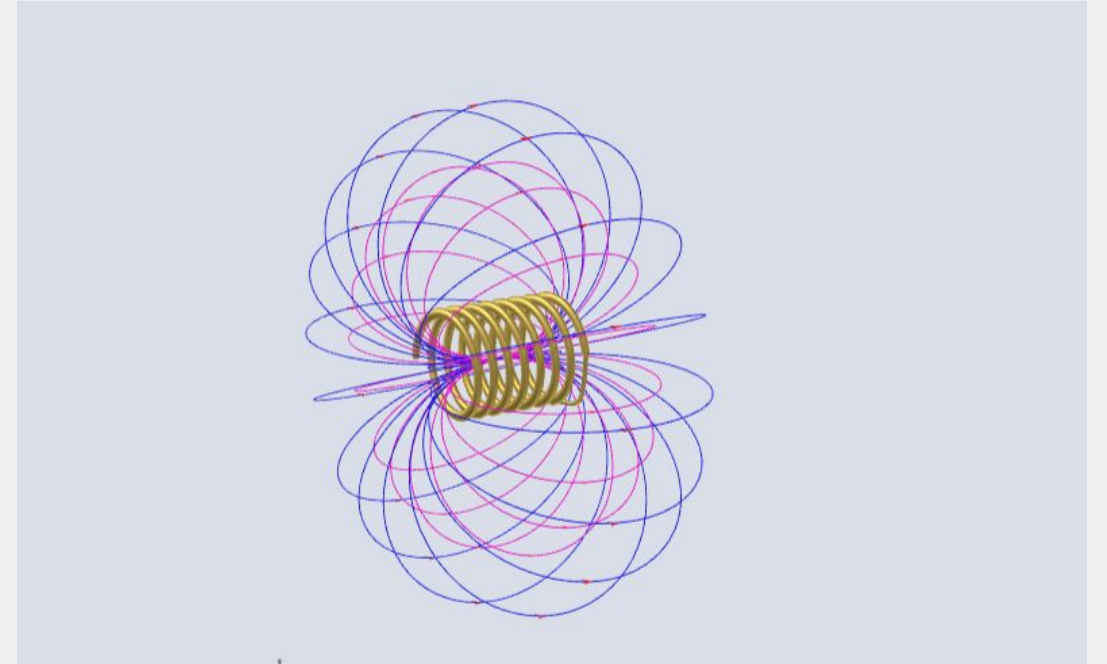
## Q5: 3D Magnet and Fields

Q5M1: 3D Magnet & Field of Lines



## Q5: 3D Magnet and Fields

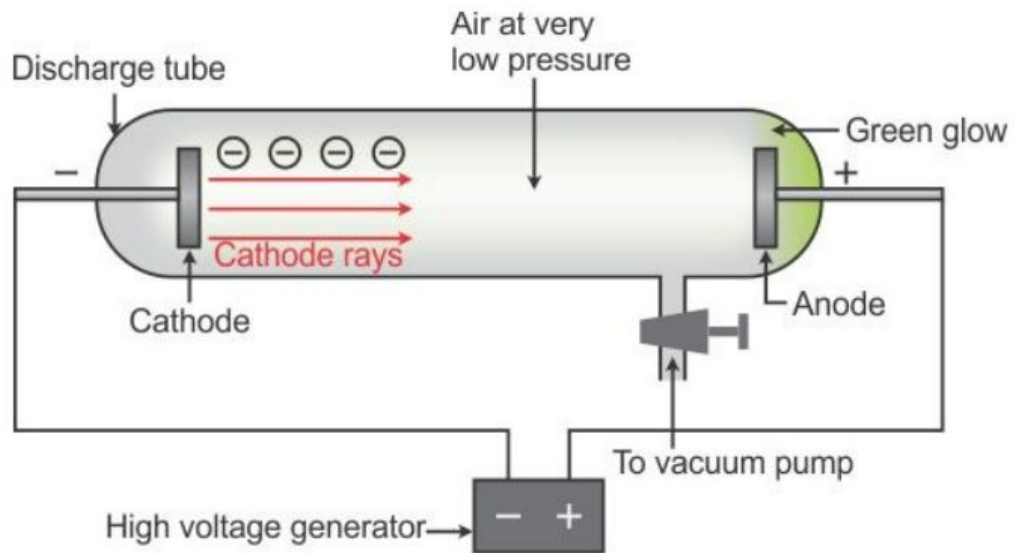
Q5M2: 3D Solenoid & Field of Lines



# PerceivED 3D Assets (Grade XI-XII)

## Q6: 3D Cathode Ray Tube

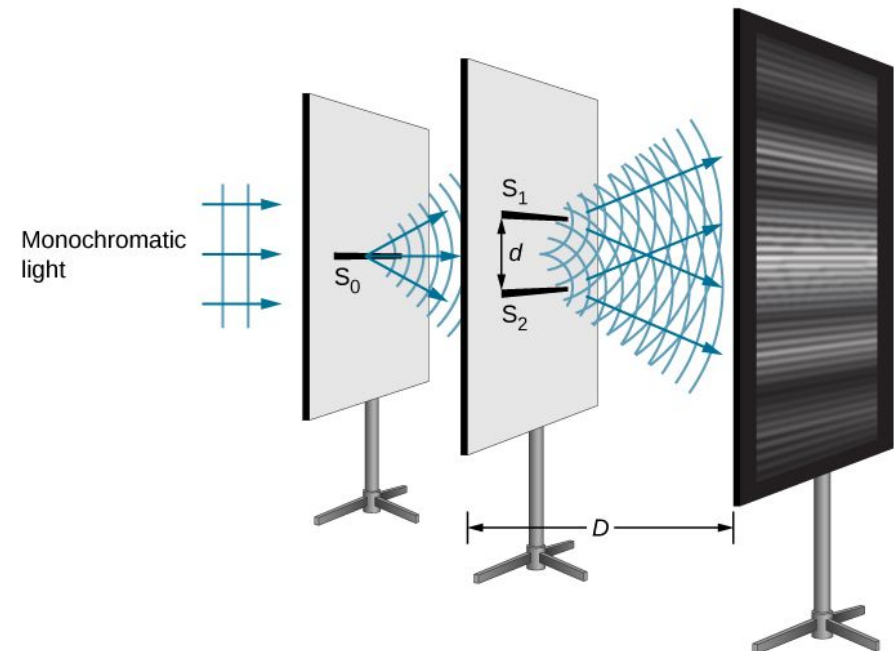
### Q6M1: 3D Setup of Cathode Ray Tube



Production of cathode rays  
**Cathode Rays Discharge Tube**

## Q7: 3D Double Slit Exp. & Light Polarisation

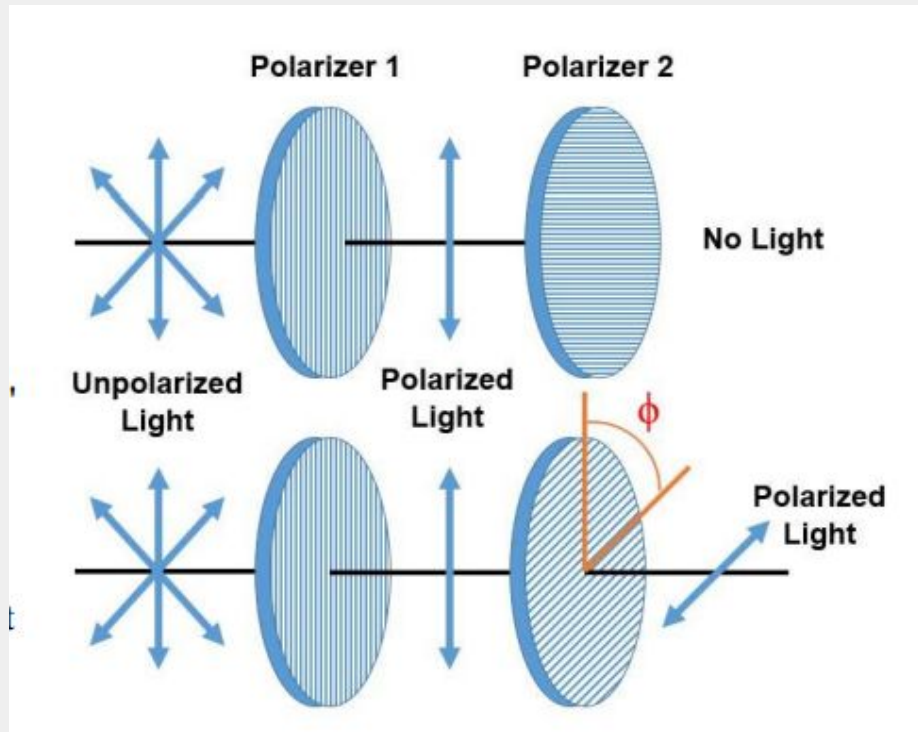
### Q7M1: 3D Setup of Young's Double Experiment



# PerceivED 3D Assets (Grade XI-XII)

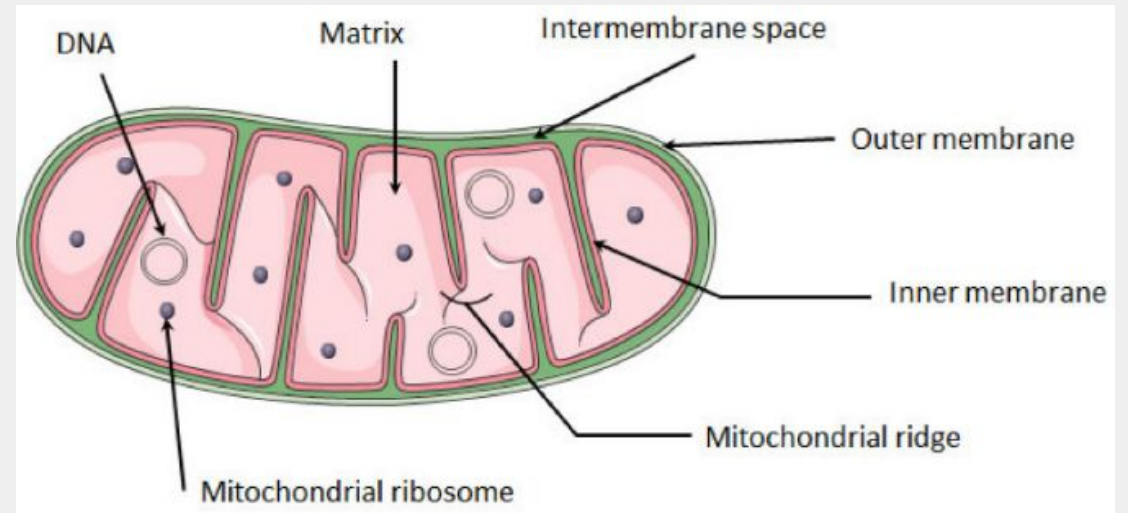
## Q7: 3D Double Slit Exp. & Light Polarisation

### Q7M2: 3D Polarisation of Light



## Q8: 3D Mitochondria & Chloroplast

### Q8M1: 3D Mitochondria Cross Section

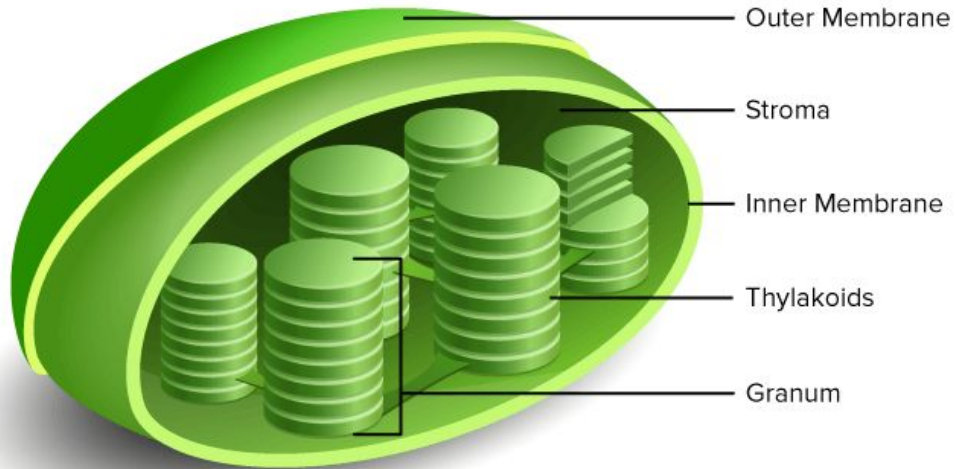




# PerceivED 3D Assets (Grade XI-XII)

## Q8: 3D Mitochondria & Chloroplast

### Q8M2: 3D Chloroplast Cross Section



## Q9: 3D DNA & Chromosome

### Q9M1: 3D DNA Double Helix



# PerceivED 3D Assets (Grade XI-XII)

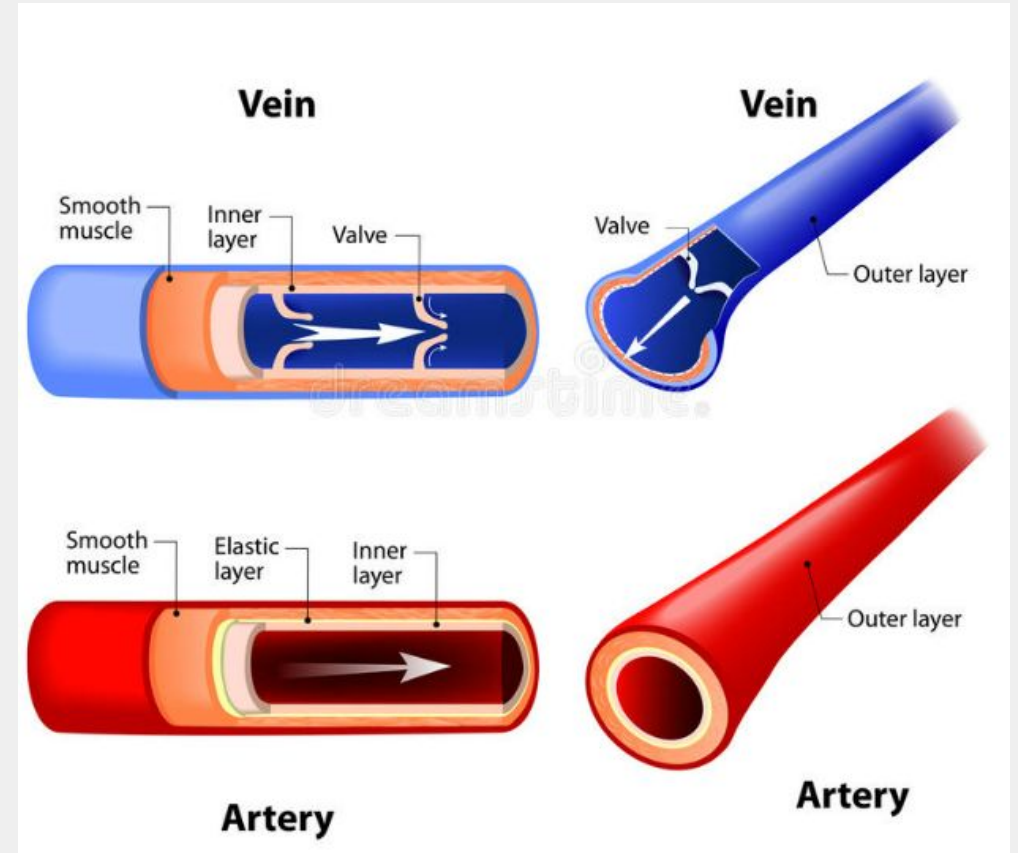
## Q9: 3D DNA & Chromosome

### Q9M2: 3D Chromosome Structure



## Q10: 3D Blood Vessel & RBC

### Q10M1 & Q10M2: 3D Artery & Vein Cross Section



# PerceivED 3D Assets (Grade XI-XII)

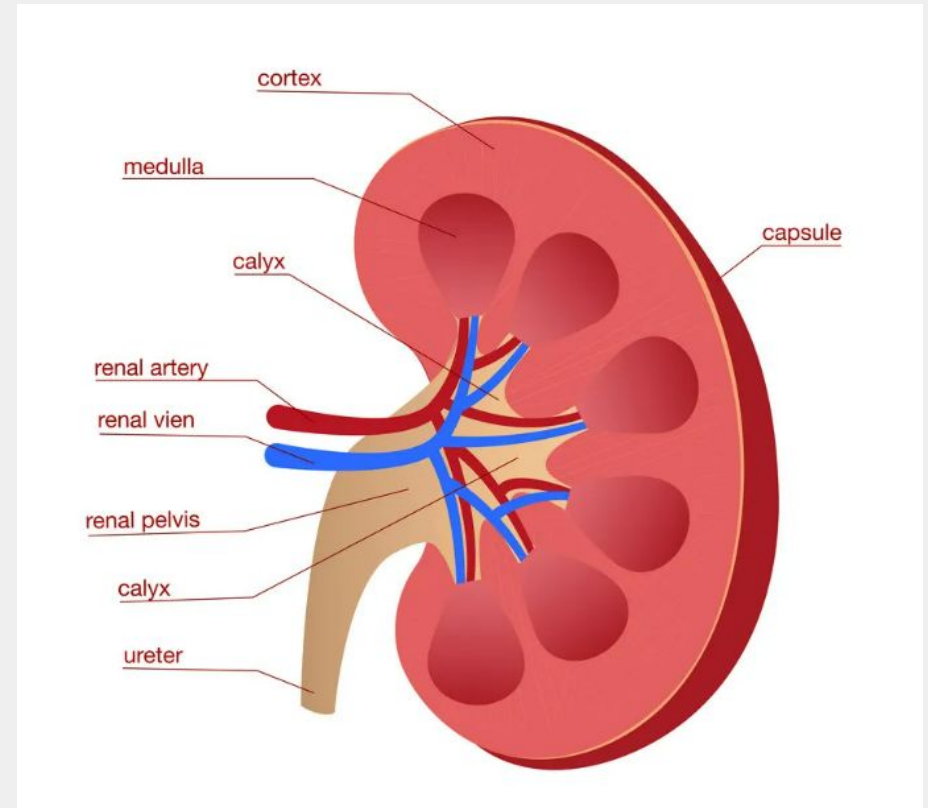
## Q10: 3D Blood Vessel & RBC

Q10M3: 3D Red Blood Cell



## Q11: 3D Kidney

Q11M1: 3D Kidney Cross Section



# PerceivED 3D Assets (Grade XI-XII)

## Q12: 3D Flower Anatomy

### Q12M1: 3D Flower and Its Parts

