



An ISO 9001-2008 Certified Organization

Universal Curriculum - Middle, High and Secondary Schools

Stereo Content List

LEVEL	TOTAL TOPIC	TOTAL DURATION
Middle School	16	00.49.28
High School	47	02.31.24
Secondary School	137	08.03.24
Total	200	11.24.16

SUBJECT	TOTAL TOPIC	TOTAL DURATION	PAGE NO.
BIOLOGY	100	04.53.30	03
Middle school	06	00.13.50	
High school	19	00.52.22	
Secondary school	75	03.47.18	
CHEMISTRY	60	03.51.38	08
Middle school	01	00.01.28	
High school	17	00.55.58	
Secondary school	42	02.54.12	
PHYSICS	40	02.39.08	11
Middle school	09	00.34.10	
High school	11	00.43.04	
Secondary school	20	01.21.54	
TOTAL TOPICS	200	11.24.16	

BIOLOGY

Topic Name	Duration
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MIDDLE SCHOOL

1. Number and size of cells	00.03.36
2. Oral care	00.01.44
3. Deficiency diseases	00.01.23
4. Hepatitis B	00.02.56
5. Polio	00.01.49
6. Respiratory & circulatory system	00.02.22

HIGH SCHOOL

1. Photosynthesis	00.02.09
2. Respiration in plants	00.01.41
3. Support in aquatic plants	00.01.09
4. Shape of cells	00.04.35
5. Eukaryotic cell	00.03.00
6. Bulk transport	00.02.25
7. Structure of DNA	00.02.54
8. Chromatin structure	00.01.38
9. Joint	00.03.11
10. Ultrastructure of kidney	00.02.35
11. Impulse transmission	00.02.55
12. Spinal cord (Melon)	00.03.29
13. AIDS	00.02.42
14. Diarrhoea	00.03.09
15. Influenza and bird flu	00.03.15

BIOLOGY

Topic Name	Duration
16. Chicken pox	00.03.47
17. Labeo rohita	00.04.08
18. Algae & diatoms	00.02.16
19. Aphids	00.01.24

SECONDARY SCHOOL

1. Gene amplification using polymerase chain reaction (PCR)	00.02.16
2. Tissue culture	00.03.23
3. Somatic hybridization	00.02.44
4. Industrial production of enzymes	00.04.07
5. Application of genetic engineering	00.03.43
6. Drug resistance	00.03.42
7. EEG and ECG	00.04.01
8. Monoclonal antibodies	00.03.34
9. Nanotechnology (In medicine)	00.04.17
10. Physiology of the photoperiodism	00.02.54
11. Internal structure of dicot root	00.03.09
12. Monocot root anatomy	00.03.03
13. Morphology of flower	00.03.59
14. Typical flower	00.04.00
15. Brassicaceae (Mustard plant)	00.03.33
16. Support system in aquatic and terrestrial plants	00.02.29
17. Solanaceae	00.02.50
18. Protein synthesis	00.05.38

BIOLOGY

Topic Name	Duration
19. Synthesis of m-RNA	00.02.37
20. Mitochondria : structure and function	00.02.36
21. Carbohydrates	00.02.23
22. Enzymes	00.01.01
23. The role of ATP in active transport	00.02.16
24. Mitosis	00.03.12
25. Meiosis	00.06.10
26. GM crops	00.03.18
27. Food chain	00.02.51
28. Energy flow in an ecosystem	00.03.46
29. Air pollution	00.01.20
30. Ozone layer	00.03.35
31. Plastic recycling	00.02.29
32. Mutation	00.02.26
33. Detailed digestive system II	00.01.45
34. Types of muscle fibers	00.04.52
35. Mechanism of muscles fiber contract	00.03.24
36. The skull	00.01.17
37. Appendicular skeleton	00.03.22
38. Sternum and ribs	00.01.32
39. Girdle bones	00.02.44
40. Vertebral column	00.01.34
41. Ultrastructure of skeletal muscles	00.03.15
42. Osteoporosis	00.03.08
43. Skin	00.03.06

BIOLOGY

Topic Name	Duration
44. Heart	00.01.57
45. Cholesterol	00.03.59
46. Atherosclerosis (Heart disease)	00.01.55
47. Blood corpuscles (Human blood)	00.03.21
48. Mechanism of breathing in man	00.02.18
49. Asthma	00.03.24
50. Passive smoking and bronchitis	00.02.29
51. Nephron (Structure & functions)	00.02.41
52. Central nervous system	00.01.56
53. Types of neurons	00.03.47
54. Neuroglial cells	00.02.02
55. Neuromuscular junction	00.02.49
56. Alzheimer's disease	00.02.18
57. Types of vaccines	00.02.32
58. How are antibodies produced?	00.01.53
59. Role of insulin in cell metabolism	00.02.13
60. Male reproductive system(Anatomy and physiology)	00.04.12
61. Female reproductive anatomy	00.03.28
62. Placenta and foetal haemoglobin	00.04.07
63. Allergy	00.05.02
64. Caffeine addiction and effects	00.03.48
65. Damage caused by UV radiation	00.02.11
66. Multiple sclerosis	00.03.39
67. Types of pathogenic bacteria	00.03.00
68. Phylum Cnidaria	00.01.11

BIOLOGY

Topic Name	Duration
69. Yeast and fungi	00.02.54
70. Algae	00.04.31
71. Malvaceae	00.02.54
72. Cockroach	00.02.44
73. Regeneration among animals	00.01.42
74. Epithelial tissue	00.04.29
75. Anatomy of the bone	00.02.31
TOTAL TOPICS IN BIOLOGY – 100	04.53.30

CHEMISTRY

Topic Name	Duration
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MIDDLE SCHOOL

1. Reaction of metal oxides with acid	00.01.28
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HIGH SCHOOL

1. Corrosion	00.04.21
2. Destructive distillation of coal	00.02.46
3. Fullerenes	00.01.23
4. Laboratory preparation of chlorine	00.02.00
5. Physical properties of alkali metals	00.03.50
6. Physical properties of ammonia	00.02.30
7. Preparation of carbon dioxide	00.01.49
8. Preparation of oxygen from hydrogen peroxide	00.01.14
9. Sulphur	00.02.22
10. Crystal hydrate	00.04.03
11. Law of definite proportions and constant compositions	00.05.02
12. Neutralization	00.03.11
13. Difference between diamond and graphite	00.04.45
14. Balancing of equations	00.02.38
15. Covalent bond or molecular bond	00.05.13
16. Polyatomic ions	00.02.35
17. Valency	00.06.16

SECONDARY SCHOOL

1. Catalytic Converter	00.06.20
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CHEMISTRY

Topic Name	Duration
2. Atomic Radius	00.05.13
3. Coordination number and Geometry of complexes	00.02.41
4. EDTA titration method	00.03.16
5. Electron affinity	00.03.56
6. Factors affecting the magnitude of electron affinity	00.05.12
7. Geometrical and Optical isomerism in complex compounds	00.04.16
8. Orbits and Orbitals	00.06.17
9. The colour of transition metal ion complexes	00.05.49
10. Allotropic forms of phosphorous	00.04.12
11. Chemical properties of phosphorus	00.03.32
12. Addition polymerization (Free radical polymerization)	00.03.07
13. Addition reactions of alkenes	00.03.26
14. Alkenes	00.06.02
15. Chlorination of benzene	00.01.58
16. Coordination addition polymerization (through Ziegler Natta Catalyst)	00.04.52
17. Geometrical isomerism in hydrocarbons	00.05.37
18. Heat of hydrogenation and Resonance in benzene	00.06.10
19. Ionic addition polymerization	00.04.00
20. Laboratory preparation and physical properties of phenol	00.03.23
21. Methane	00.01.56
22. Nitration of Benzene	00.02.09
23. Sulphonation of Benzene	00.02.23
24. Tacticity of polymer	00.03.10
25. Physical properties of Aldehydes and Ketones	00.05.57

CHEMISTRY

Topic Name	Duration
26. Applications of electrolysis (Part - I)	00.04.04
27. Chemical bonding	00.04.13
28. Diffusion	00.02.48
29. Factors Affecting the Product of Electrolysis Part 2	00.06.09
30. Hybridization of atomic orbitals	00.03.10
31. Hydrogen Bonding	00.06.16
32. Reaction of metal carbonates with acid	00.02.22
33. Redox reaction	00.05.32
34. Standard hydrogen electrode	00.01.36
35. Types of van der waals forces	00.05.11
36. Use of standard hydrogen electrode as a cathode	00.04.58
37. Use of standard hydrogen electrode as an anode	00.06.00
38. Van Der Waals Forces (Intermolecular Forces)	00.04.02
39. Vapour pressure of a solvent	00.02.00
40. VSEPR theory	00.04.01
41. Laboratory Preparation of Sulphur Dioxide	00.03.03
42. Laboratory preparation of Ammonia	00.03.53
TOTAL TOPICS IN CHEMISTRY – 60	03.51.38

PHYSICS

Topic Name

Duration

MIDDLE SCHOOL

1. Balanced forces	00.04.24
2. Force (A push or a pull)	00.02.20
3. Transparent, translucent and opaque objects	00.03.48
4. Periscope	00.05.01
5. Electric fuse	00.04.26
6. Electric Bell	00.03.29
7. Finding directions	00.05.37
8. Solar system	00.02.00
9. Effects of force	00.03.05

HIGH SCHOOL

1. Lenses	00.05.16
2. Density	00.05.07
3. Inertia	00.03.45
4. Propagation of sound waves through different media	00.02.45
5. Sound	00.03.51
6. Reflection of light and its laws	00.04.07
7. Electroplating	00.02.54
8. Properties of electric charge	00.05.25
9. Fleming's left hand rule	00.02.29
10. Magnetic relay	00.03.57
11. Reed switch	00.03.28

PHYSICS

Topic Name	Duration
SECONDARY SCHOOL	
1. Application of Bernoulli's principle	00.04.45
2. Alpha emission - 1	00.05.02
3. Applications of laser (Part- I)	00.02.41
4. Rutherford's atomic model	00.03.56
5. Internal combustion engine	00.06.09
6. Compound microscope	00.03.37
7. Prism spectrometer	00.03.53
8. Terms related to curved mirrors	00.03.22
9. Van de Graaff generator	00.04.24
10. Electric field	00.04.00
11. Electric field lines	00.03.13
12. Application of Gauss's theorem (Part - I)	00.03.50
13. Gauss's theorem (Part - I)	00.04.09
14. Gauss's theorem (Part -II)	00.03.56
15. Motion of charge in magnetic field (Part - I)	00.04.13
16. Motion of charge in magnetic field (Part - II)	00.05.20
17. Magnetic declination	00.01.25
18. Semiconductors	00.07.04
19. Intrinsic semiconductors	00.03.40
20. Extrinsic semiconductor Part - II	00.03.15
TOTAL TOPICS IN PHYSICS – 40	02.39.08
TOTAL STEREO TOPICS – 200	11.24.16