

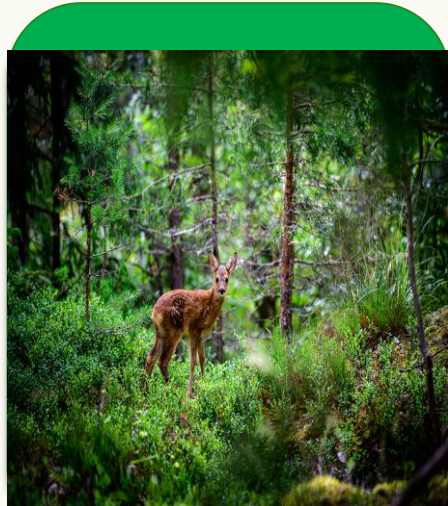
CURRICULUM ROAD MAP – Forest Pathway

YEAR 9

TERM 1

Topic: Living Things and Their Habitats
Skills: Explain how organisms depend on their habitats. Describe how changes in the environment affect living things.

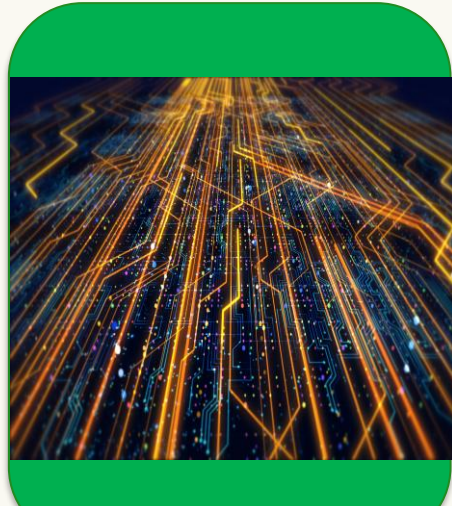
Key Vocab:
Habitat
Ecosystem
Environment
Conservation



TERM 2

Topic: Electricity and Renewable Energy
Skills: Construct simple circuits and explain energy transfer. Compare renewable and non-renewable energy sources.

Key Vocab:
Renewable
Solar
Wind
Battery
Circuit
Current



TERM 3

Topic: Light and Light Pollution
Skills: Describe how light travels and forms shadows. Explain how light pollution affects people and wildlife.

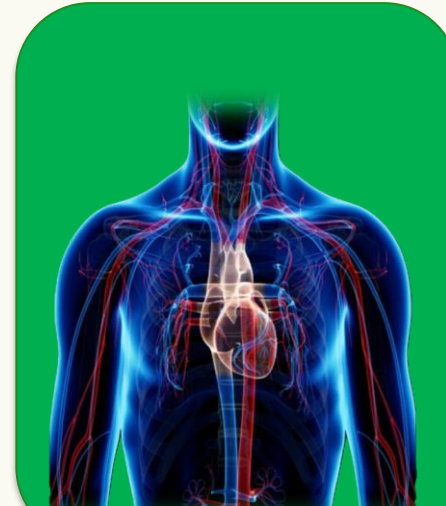
Key Vocabulary:
Reflection
Refraction
Shadow
Transparent
Opaque
Pollution
Lens



TERM 4

Topic: The Circulatory System
Skills: Identify the main parts of the circulatory system and explain their functions. Describe how blood transports substances around the body.

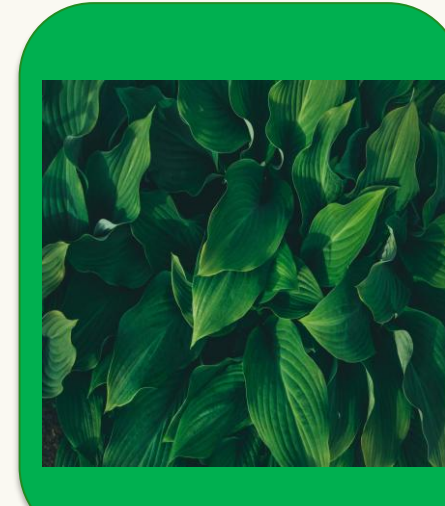
Key Vocab:
Heart
Blood
Artery
Vein
Capillary



TERM 5

Topic: Variation/Adaptation
Skills: Explain how organisms vary and adapt to survive in their environment. Describe inherited and environmental variation.

Key Vocab:
Gene
Trait
Environment
Inheritance
Species
Survival



TERM 6

Topic: Fossils, Heating, cooling
Skills: Explain how fossils formed and what they tell us about the past. Describe how heating and cooling changes materials.

Key Vocab:
Fossil
Evolution
Natural Selection
Extinction
Sediment
Heating
Cooling



CURRICULUM ROAD MAP – Options- BTECH Applied Science- Level 1/2

YEAR 10

TERM 1

Topic: Cell and Microscopy
Skills: Use a microscope safely to observe cells, explain the functions of specialised cells.

Key Vocabulary
Magnification
Cell
Chloroplast
Nucleus
Sperm cell



TERM 2

Topic: Human Body Systems
Skills: Identify the main human body system and parts, explain the function of the endocrine/nervous system.

Key Vocabulary:
Blood vessel
Immunity
Diseases
White blood cells
Platelet
Plasma



TERM 3

Topic: Blood and Health
Skills: Identify the components of blood and explain their functions. Investigate how blood supports transport, immunity and overall health.

Key Vocabulary:
Blood vessel
Immunity
Diseases
White blood cells
Platelet
Plasma



TERM 4

Topic: Matter and Physical Properties
Skills: Describe the particle model. Investigate changes of state, measure physical properties of materials.

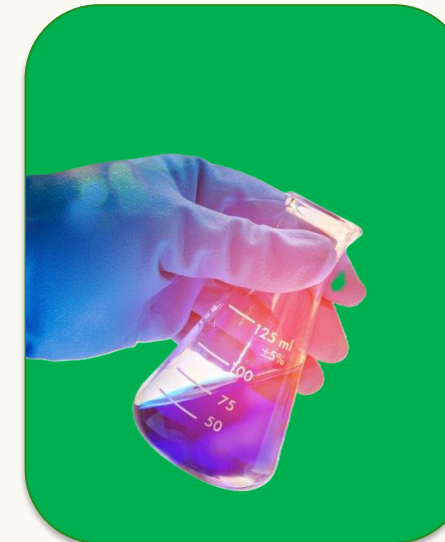
Key Vocabulary:
Conductivity
Melting
Boiling
Density
Solubility
Viscosity



TERM 5

Topic: Elements and Chemical Reactions
Skills: Identify elements, compounds, mixtures. Investigate indicators and interpret experimental results.

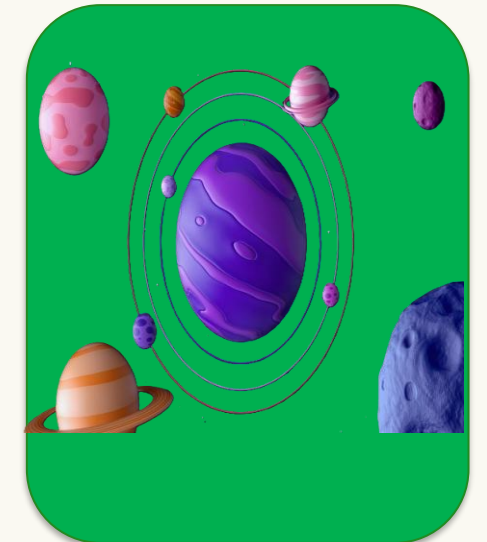
Key Vocabulary:
Element
Compound
Reactant
Product
Acid
Alkali



TERM 6

Topic: Energy and Our Universe
Skills: Explain energy transfer. Describe features of the Solar System.

Key Vocabulary:
Energy Transfer
Renewable/Non-renewable
Solar System
Planet



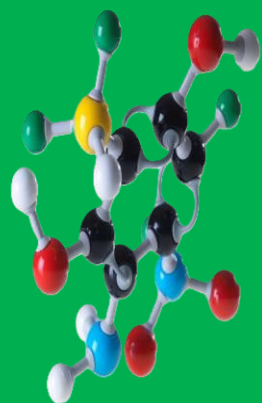
CURRICULUM ROAD MAP – Options- BTECH Applied Science- Level 1/2

YEAR 11

TERM 1

Topic: Atoms
Skills: Identify structure of atoms, describe the arrangement of protons, neutrons and electrons, learn how atoms gains and loses ions.

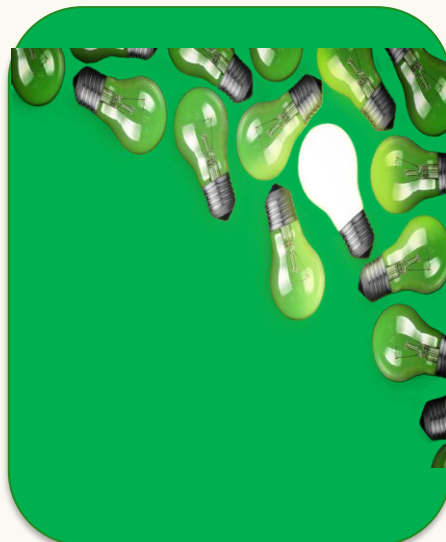
Key Vocab:
Atom
Proto
Neutron
Electron
Ion
Elements



TERM 2

Topic: Electricity and sustainability.
Skills: Construct simple circuits, identify circuits components. Explain how electricity is generated, importance of sustainable energy.

Key Vocab:
Voltage
Current
Circuit
Electricity
Resistance



TERM 3

Topic: Ecology and the environment.
Skills: Investigate ecosystems. Explaining how human activities impact biodiversity and sustainability.

Key Vocab:
Ecosystems
Habitat
Pollution
Food web/chain
Conservation



TERM 4

Topic: Bonding and Chemical reactions
Skills: Describe how atoms bond to form compounds, identify types of reactions, can carry out simple chemical reaction experiment.

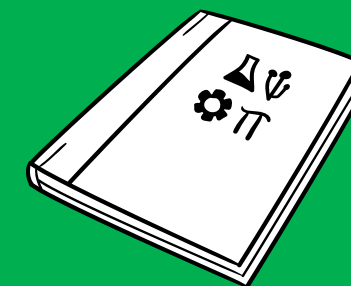
Key Vocab:
Ionic
Compound
Covalent
Reactant
Product



TERM 5

Topic: Revision
Skills: Recall and apply scientific knowledge from across the units. Use examination techniques and practical evidence to answer questions

Key Vocab:
Analyse
Methodology
Evidence
Evaluate
Interpret
Conclusion



TERM 6

Topic: Preparation for post 16