|  |
| --- |
| | Jacinta Burke |

Biology

Living Things

|  |  |  |  |
| --- | --- | --- | --- |
| **KEYWORDS / TERMS TO BE TAUGHT** | | | |
| **Organisms** | **Respiration** | **Sensitivity** | **Stimulus** |
| **Excretion** | **Reproduction** | **Growth** | **Movement** |
| **Vertebrates** | **Invertebrates** | **Mammals** | **Characteristic** |
| **Key** | **Photosynthesis** |  |  |

Cells and the Microscope

|  |  |  |  |
| --- | --- | --- | --- |
| **KEYWORDS / TERMS TO BE TAUGHT** | | | |
| **Cell** | **Microscope** | **Focus** | **Lens** |
| **Magnify** | **Image** | **Slide** | **Cover slip** |
| **Iodine** | **Cell membrane** | **Nucleus** | **Chloroplast** |
| **Cell wall** | **Vacuole** | **Cytoplasm** |  |

Cell Diversity

|  |  |  |  |
| --- | --- | --- | --- |
| **KEYWORDS / TERMS TO BE TAUGHT** | | | |
| **Cell** | **Blood cell** | **Nerve Cell** | **Muscle cell** |
| **Tissue** | **Skin** | **Muscle** | **Nervous** |
| **Organ** | **Heart** | **Lungs** | **Brain** |
| **Organ System** | **Digestive** | **Respiratory** | **Circulatory** |
| **Excretory** | **Skeletal** | **Nervous** | **Reproductive** |
| **Cell division** | **Growth** |  |  |

Food

|  |  |  |  |
| --- | --- | --- | --- |
| **KEYWORDS / TERMS TO BE TAUGHT** | | | |
| **Carbohydrates** | **Fibre** | **Starch** | **Constipation** |
| **Protein** | **Vitamins** | **Minerals** | **Calcium** |
| **Iron** | **Food Pyramid** | **Fat** | **Water** |
| **Balanced Diet** | **Growth** | **Nutrients** |  |

Digestion

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Oesophagus** | **Stomach** | **Liver** | **Pancreas** |
| **Protein** | **Vitamins** | **Minerals** | **Calcium** |
| **Small intestine** | **Large intestine** | **Molars** | **Premolars** |
| **Incisors** | **Canines** | **Enzyme** | **Saliva** |
| **Mouth** | **Absorption** | **Churns** | **Secretes** |

Respiration

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Aerobic** | **Respiration** | **Product** | **Carbon dioxide** |
| **Trachea** | **Bronchus** | **Bronchiole** | **Air sac /alveolus** |
| **Diaphragm** | **Cancer** | **Bronchitis** | **Breathing Rate** |
| **Capillaries** | **Diffusion** | **Gas exchange** |  |

Circulatory System

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Red cell** | **White cell** | **Platelet** | **Plasma** |
| **Aorta** | **Vena Cava** | **Pulmonary Vein** | **Pulmonary Artery** |
| **Atrium** | **Ventricle** | **Septum** | **Pulse** |
| **Vein** | **Artery** | **Capillaries** | **Haemoglobin** |
| **Lumen** | **Valves** | **Exercise** | **Smoking** |

Skeleton and Muscles

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Ribs** | **Skull** | **Vertebrae** | **Humerus** |
| **Radius** | **ulna** | **Femur** | **Tibia** |
| **Fibula** | **Pelvis** | **Scapula** | **Clavicle** |
| **Triceps** | **Antagonistic** | **Biceps** |  |

Excretion

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Lungs** | **Kidneys** | **Skin** | **Chemical waste** |
| **Carbon Dioxide** | **Urine** | **Sweat** | **Filters** |
| **Water** | **Bladder** | **Ureter** | **Urethra** |
| **Renal Artery** | **Renal Vein** | **Salts** |  |

Reproduction and Genetics

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Gamete** | **Sperm** | **Egg** | **Fertilisation** |
| **Uterus** | **Fallopian Tube** | **Ovary** | **Vagina** |
| **Ovulation** | **Menstruation** | **Fertile Period** | **Intercourse** |
| **Penis** | **Testes** | **Puberty** | **Placenta** |
| **Seminal Fluid** | **Semen** | **Pregnant** | **Amniotic Fluid** |
| **Birth** | **Labour** | **Contraception** | **Sperm Duct** |

Genetics

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Chromosome** | **Characteristic** | **Genes** | **DNA** |
| **Protein** | **Inherited** | **Nucleus** | **Non Inherited** |

Ecology

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Ecology** | **Habitat** | **Organisms** | **Environment** |
| **Community** | **Population** | **Food Chain** | **Food Web** |
| **Consumer** | **Producer** | **Herbivore** | **Carnivore** |
| **Decomposers** | **Bacteria** | **Fungi** | **Omnivores** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Quadrat** | **Line Transect** | **Pooter** | **Beating Tray** |
| **Sweep Net** | **Competition** | **Adaptation** | **Resources** |
| **Pollution** | **Conservation** | **Waste management** | **Acid Rain** |
| **Reduce** | **Reuse** | **Recycle** | **Landfill** |

Microbiology

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Bacteria** | **Fungi** | **Viruses** | **Harmful** |
| **Antibiotics** | **Brewing** | **Food Spoilage** | **Baking** |
| **Yoghurt** | **Beneficial** | **Colds** | **Athletes Foot** |
| **Measles** | **Tuberculosis** |  |  |

Plant Structure

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Root** | **Stem** | **Leaf** | **Buds** |
| **Tap** | **Structure** | **Xylem** | **Phloem** |
| **Adventitious** | **Support** | **Photosynthesis** | **Stomata** |
| **Anchor** | **Flower** | **Minerals** | **Transport** |

Photosynthesis and plant responses

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Photosynthesis** | **Oxygen** | **Glucose** | **Carbon Dioxide** |
| **Geotropism** | **Phototropism** | **Iodine** | **Chloroplast** |
| **Chlorophyll** | **Stomata** | **Starch** |  |

Plant Reproduction

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Flower** | **Petal** | **Sepal** | **Carpel** |
| **Stigma** | **Style** | **Ovary** | **Anther** |
| **Filament** | **Stamen** | **Pollen** | **Pollination** |
| **Seed** | **Dispersal** | **Insects** |  |

The Senses

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Sensory Nerve** | **Motor Nerve** | **Eye** | **Pupil** |
| **Lens** | **Cornea** | **Retina** | **Optic Nerve** |
| **Cilary Muscle** | **Iris** | **Pupil** | **Focus** |
| **Brain** | **Spinal Cord** | **Stimulus** | **Nerve** |
| **Hearing** | **Touch** | **Taste** | **Smell** |

Chemistry

States of Matter

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Matter** | **Solid** | **Liquid** | **Gas** |
| **Mass** | **Melting** | **Compressed** | **Freezing** |
| **Particles** | **Condensing** | **Evaporating** |  |

Elements, Compounds and Mixtures

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Atom** | **Element** | **Properties** | **Molecules** |
| **Chemically** | **Substances** | **Mingled** | **Air** |
| **Water** | **Ink** | **Steel** | **Physical Change** |
| **Chemical Change** | **Compound** | **Mixture** | **Sea Water** |

Elements

|  |  |  |  |
| --- | --- | --- | --- |
| **Hydrogen** | **Helium** | **Lithium** | **Boron** |
| **Carbon** | **Oxygen** | **Nitrogen** | **Fluorine** |
| **Sodium** | **Magnesium** | **Neon** | **Potassium** |
| **Calcium** | **Chlorine** | **Argon** | **Aluminium** |
| **Silicon** | **Phosphorous** | **Beryllium** | **Sulphur** |

Solutions

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Solution** | **Dilute** | **Concentrated** | **Temperature** |
| **Solute** | **Dissolve** | **Suspension** | **Solvent** |
| **Crystals** | **Copper Sulphate** | **Cooling** |  |

Separating Mixtures

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Filtration** | **Chromatography** | **Soluble** | **Insoluble** |
| **Evaporation** | **Condenser** | **Evaporating Dish** | **Rock Salt** |
| **Distillation** | **Filter Funnel** | **Solvent** |  |

The Atom

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Atom** | **Element** | **Compound** | **Molecule** |
| **Positive** | **Negative** | **Orbit** | **Proton** |
| **Neutron** | **Electron** | **Neutral** | **a.m.u.** |
| **Isotope** | **Particles** | **Bohr Diagram** | **Electronic Configuration** |

The Periodic Table

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Elements** | **Groups** | **Periods** | **Shells** |
| **Atomic Mass** | **Atomic Number** | **Protons** | **Electrons** |
| **Metals** | **Non Metals** | **Alkali** | **Alkaline Earth** |
| **Halogens** | **Noble Gases** | **Neutrons** | **Mendeleev** |

Chemical Bonding

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Ionic** | **Covalent** | **Share** | **Lose** |
| **Gain** | **Ions** | **Shells** | **Electron** |
| **Conductivity** | **Octet Rule** | **Magnesium Oxide** | **Crystal Lattice** |
| **Hydrogen Molecule** | **Oxygen Molecule** | **Methane molecule** | **Sodium Chloride** |

Acids and Bases

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Acid** | **Neutral** | **Indicator** | **Sharp** |
| **Base** | **Litmus Red** | **Scale** | **Sour** |
| **pH** | **Litmus Blue** | **Corrosive** | **Hydrochloric Acid** |
| **Sulphuric Acid** | **Sodium Hydroxide** | **Hydrogen Peroxide** | **Limewater** |

The Atmosphere

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Nitrogen** | **Carbon Dioxide** | **Mixture** | **Cobalt Chloride** |
| **Oxygen** | **Rusting** | **Carbon** | **Calcium Carbonate** |
| **Hydrochloric Acid** | **Hydrogen Peroxide** | **Manganese Dioxide** | **Magnesium** |

Water

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Ice** | **Resins** | **Filtration** | **Chlorination** |
| **Steam** | **Water Cycle** | **Settling** | **Electrolysis** |
| **Ion Exchange** | **Screening** | **Fluoridation** | **Hard Water** |
| **Soft Water** | **Lather** | **Scum** | **Ions** |

Metals

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Lustrous** | **Sonorous** | **Hard** | **Alkaline Earth** |
| **Malleable** | **Dense** | **Reactivity** | **Rust** |
| **Ductile** | **Conductors** | **Alkali** | **Galvanise** |
| **Hydrochloric Acid** | **Hydrogen** | **Paint** |  |

Fossil Fuels

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Carbon** | **Hydrogen** | **Methane** | **Coal** |
| **Oil** | **Gas** | **Acid Rain** | **Sulphur Dioxide** |
| **Carbon Dioxide** | **Global Warming** | **Ozone Layer** | **Pollution** |

Plastics

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Plastic** | **Polymers** | **Nylon** | **Non-Biodegradable** |
| **Polythene** | **Crude Oil** | **Strong** | **Waterproof** |
| **PVC** | **Polystyrene** | **Durable** | **Insulation** |

Physics

Measurement

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Length** | **Area** | **Kilogram** | **Opisometer** |
| **Mass** | **Volume** | **Second** | **Callipers** |
| **Time** | **Metre** | **Metre Stick** | **Balance** |
| **Graduated Cylinder** | **Over Flow Can** | **Floatation** | **Density** |

Energy

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Energy** | **Sound** | **Electrical** | **Conservation of Energy** |
| **Kinetic** | **Light** | **Magnetic** | **Renewable** |
| **Potential** | **Chemical** | **Nuclear** | **Non Renewable** |
| **Tidal** | **Biomass** | **Hydroelectric** | **Geothermal** |
| **Wind** | **Solar** | **Energy Conversion** |  |

Motion

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Speed** | **Velocity** | **Metres/S** | **Seconds** |
| **Distance** | **Acceleration** | **Direction** | **Metres** |
| **Time** |  |  |  |

Force

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Newton** | **Magnetic Force** | **Spring Balance** | **Extension** |
| **Gravity** | **Friction** | **Weight** | **Hooke’s Law** |
| **Electric Force** | **Lubrication** | **Mass** |  |

Gravity and Levers

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Moment of Force** | **Law of the Lever** | **Equilibrium** | **Neutral** |
| **Lamina** | **Fulcrum** | **Stable** |  |
| **Lever** | **Load** | **Unstable** |  |

Pressure

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Pressure** | **Depth** | **Altimeter** | **Pascal** |
| **Force** | **Atmospheric Pressure** | **Isobar** | **Barometer** |
| **Area** | **Pressure Gauge** | **Low Pressure** | **High Pressure** |

Work and Power

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Work** | **Time** | **Power** | **Newton** |
| **Force** | **Joule** | **Watt** | **Average Power** |
| **Distance** | **Newton Metre** | **Kilowatt** |  |

Heat

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Heat** | **Convection** | **Boiling Point** | **Insulation** |
| **Expansion** | **Radiation** | **Melting Point** | **Solids** |
| **Contraction** | **Bimetallic Strip** | **Latent Heat** | **Liquids** |
| **Conduction** | **Temperature** | **Cooling Curve** | **Gases** |

Light

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Light** | **Luminous** | **Refraction** | **Periscope** |
| **Photosynthesis** | **Non Luminous** | **Spectrum** | **Image** |
| **Solar Energy** | **Dispersion** | **Convex Lens** | **Crooke’s Radiometer** |
| **Shadows** | **Reflection** | **Concave Lens** | **Prism** |

Sound

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Sound** | **Vibration** | **Reflection** | **Sound Intensity** |
| **Wave** | **Medium** | **Refraction** | **Decibel** |
| **Energy** | **Bell Jar** | **Echo** | **Ultrasound** |

Magnetism

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Magnetism** | **Attraction** | **Alloys** | **Magnetic Field Lines** |
| **Iron** | **Repulsion** | **Magnetic Field** | **Iron Filings** |
| **North Pole** | **Cobolt** | **Compass** |  |
| **South Pole** | **Nickel** | **Bar magnet** |  |

Static Electricity

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Positive charge** | **Perspex Rod** | **Current** | **Resistance** |
| **Negative charge** | **Polythene Rod** | **Ampere** | **Ohm** |
| **Electron** | **Insulator** | **Voltage** | **Earthing** |
| **Proton** | **Conductor** | **Volts** | **Lightning Rod** |

Current Electricity

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Ohm’s Law** | **Series** | **Current** | **Resistance** |
| **Resistor** | **Parallel** | **Ampere** | **Ohm** |
| **Voltmeter** | **Alternating** | **Voltage** | **Flow** |
| **Ammeter** | **Direct** | **Volts** | **Charge** |

Electricity in the Home

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Direct Current** | **Live wire** | **Kilowatt hour** | **Electroplating** |
| **Alternating Current** | **Neutral Wire** | **Fuse** | **Circuit Breaker** |
| **Plug** | **Earth Wire** | **Current Rating** | **Cord Grip** |

Electronics

|  |  |  |  |
| --- | --- | --- | --- |
| **KEY WORDS / TERMS TO BE TAUGHT** | | | |
| **Diode** | **Forward Bias** | **Switch** | **Buzzer** |
| **Light Dependent Resistor LDR** | **Reverse Bias** | **Lamp** | **Circuit** |
| **Light Emitting Diode LED** | **Battery** | **Variable Resistor** |  |