

DE LA SALLE SCHOOL
ST HELENS
YEAR 7 – SCIENCE: Circle of Life
Half Term 4/5/6



By the end of this half term I will:

- Describe the changes that occur in males and females during puberty
- Know the parts of the male and female reproductive system and their function
- Know what happens during the menstrual cycle
- Know what happens during fertilisation
- Be able to explain the stages of pregnancy
- Know how maternal lifestyle can affect the developing child
- Understand the role of DNA, draw and explain simple genetic cross diagrams
- Be able to explain what is meant by natural selection
- Know the term biodiversity and the role of “gene banks”

Key Terms I will learn this half term:

- Puberty
- Menstrual cycle
- DNA
- Fertilisation
- Embryo
- Zygote
- Gamete
- Gene bank
- Evolution
- Natural selection
- Hormone
- Variation

Learning Outcomes

Literacy Focus

Homework

Summer term weeks 1-2 – I will be able to:

- Understand what DNA is and what it does
- What the structure of DNA is and how this helps reproduction
- To understand what we mean by inheritance, and variation
- To understand natural selection based on inheritance and variation

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Make a labelled model of the structure of DNA,
or
Describe how an animal you are interested in has changed over time due to natural selection.

Summer term weeks 3-4 – I will be able to:

- Know the parts of the male and female reproductive system and the function of these parts.
- To know the changes that occur to male and female during puberty.
- To be able to describe the menstrual cycle.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Learn the parts of the reproductive system and the function of these parts for a test in class.

Summer term weeks 5-6 – I will be able to:

- Know what happens during fertilisation
- Be able to use key terms to describe the stages of pregnancy
- To know the effect of maternal lifestyle during pregnancy
- To be able to draw simple genetic cross diagrams

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Revision for end of topic test.

END OF TOPIC TEST

DE LA SALLE SCHOOL
ST HELENS
YEAR 7 – SCIENCE: Electricity and Magnetism
Half Term 4/5/6



By the end of this half term I will:

- Be able to draw series and parallel circuit diagrams using symbols for the components
- Understand the effect of series and parallel circuit on current
- Be able to model what is happening in a circuit
- Know which materials are magnetic and some properties of magnetism
- Be able to draw magnetic field
- Be able to explain magnetism using domain theory
- Be able to make and electromagnet and know what affects its strength
- Know some uses of magnets

Key Terms I will learn this half term:

- Magnetism
- Magnetic field
- Series
- Parallel
- Circuit
- Current
- Voltage
- Domain
- Electromagnet
- Ammeter
- Voltmeter
- Component

Learning Outcomes

Literacy Focus

Homework

Summer term weeks 1-2 – I will be able to:

- Make and draw series and parallel circuits
- Measure current and explain this in relation to what happens to the brightness of bulbs in series and parallel circuits

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Learn the symbols for common components and be able to draw simple circuit using them.

Summer term weeks 3-4 – I will be able to:

- Come up with my own model for a circuit and use it to explain what is happening in circuit
- List magnetic materials
- Draw magnetic field diagrams
- Make a simple magnet

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Design an information poster for primary school pupils to explain how a series circuit works using a model of your choice.

Summer term weeks 5-6 – I will be able to:

- Explain magnetism using domain theory
- Explain how to make and adjust the strength of an electromagnet
- Know uses of magnets and electromagnets

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

List some household uses for magnets and electromagnets.

END OF TOPIC TEST

Revision for end of topic test.

DE LA SALLE SCHOOL
ST HELENS
YEAR 7 – SCIENCE: Madagascar
Half Term 4/5/6



By the end of this half term I will:

- Be able to recognize different habitats
- Be able to describe adaptations of animals that enable them to survive in these habitats
- Be able to classify organism based on their features
- Be able to use a key
- Know what is meant by competition and what organisms need to compete for
- Be able to draw food chains and webs
- Be able to draw pyramids of number and biomass
- Know the structure of a leaf and how it helps with photosynthesis
- Be able to test a leaf for starch
- Understand transport in a plant
- Describe reproduction and seed dispersal in plants

Key Terms I will learn this half term:

- Habitat
- Ecosystem
- Adaptation
- Classification
- Key
- Competition
- Predator
- Prey
- Food chain / Food web
- Pyramid of number
- Pollination
- Seed dispersal

Learning Outcomes

Literacy Focus

Homework

Summer term weeks 1-2 – I will be able to:

- Recognise different habitats and which species will live there based on their features.
- To classify organisms based on their features.
- Use a key to identify organisms.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Use a key to identify unknown organisms based on their features.

Summer term weeks 3-4 – I will be able to:

- Explain competition between organisms.
- Draw food chains and webs and explain the advantages and disadvantages of each.
- Draw and explain pyramids of number and biomass.
- Explain bioaccumulation.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Explain the effect of altering the number of individuals of a species in a food web on the other organisms in a food web.

Summer term weeks 5-6 – I will be able to:

- Label the structure of a leaf
- Explain transport in a plant
- Explain reproduction and seed dispersal in plants

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Revision for end of topic test.

END OF TOPIC TEST

DE LA SALLE SCHOOL
ST HELENS
YEAR 8 – SCIENCE: Dr Who
Half Term 4/5/6



By the end of this half term I will:

- Know that the periodic table is a list of the known elements and how they are arranged
- Know how to test for acid and alkalis
- Know what is produced during a reaction between metal and acid and metal and oxygen
- Know what is meant by the reactivity series and use this to explain why displacement reactions take place
- Extract metal from a metal ore
- Know what alloys are and why they have different properties from the metals they are made from

Key Terms I will learn this half term:

- Periodic table
- Metals
- Non-metals
- Groups
- Periods
- Alkali metals
- Reactivity series
- Displacement
- Oxidation
- Acids
- Alkali
- Indicator
- pH
- Alloys

Learning Outcomes

Literacy Focus

Homework

Summer term weeks 1-2 – I will be able to:

- Describe the arrangement of the periodic table
- Explain how to test a substance to see if it is an acid or an alkali

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Learn the structure of the periodic table

Summer term weeks 3-4 – I will be able to:

- Describe the reactions of the alkali metals with water and oxygen
- Explain what is produced during a reaction with metal and acid and metal and oxygen and write word equations for these reactions. (Higher level pupils may do balanced symbol equations)
- Explain the reactivity series

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Write equations for the reactions of metals with acid and oxygen.

Summer term weeks 5-6 – I will be able to:

- Use the reactivity series to explain displacement reactions
- Extract a metal from ore
- Explain why alloys are produced

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Describe why aluminium cannot be extracted using carbon.

END OF TOPIC TEST

Revision for end of topic test.

DE LA SALLE SCHOOL
ST HELENS
YEAR 8 – SCIENCE: Fossil Hunters
Half Term 4/5/6



By the end of this half term I will:

- Be able to name the three groups of rocks and give examples of each
- Group rocks based on their features
- Know how the size of crystals depends on the rate of cooling
- Describe the formation of sedimentary rocks
- Know which rocks may contain fossils and which will not
- Be able to describe the structure of the Earth
- Explain evidence that can be gathered from fossils

Key Terms I will learn this half term:

- Igneous
- Sedimentary
- Metamorphic
- Crystal
- Erosion
- Sedimentation
- Rock cycle
- Extinction
- Fossil

Learning Outcomes

Literacy Focus

Homework

Summer term weeks 1-2 – I will be able to:

- Group rocks into groups based on their features.
- Name the three groups of rocks.
- Explain the size of crystals based on the rate of cooling.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Find some local rocks and decide which type of rock they belong to and why.

Summer term weeks 3-4 – I will be able to:

- Describe the formation of metamorphic rocks.
- Explain how erosion and sedimentation occur and how sedimentary rocks form.
- Explain how fossils are formed and the types of rock they are likely to be found in.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Draw a timeline for the formation of a fossil.

Summer term weeks 5-6 – I will be able to:

- Explain how fossils can be used to provide evidence of evolution and past environmental conditions.
- Explain the rock cycle.

Spelling

Will be appropriate to the lessons and level of the pupils but an example might be:

Research a famous fossil providing information such as finder, what the fossil is of, what evidence it provides for evolution.

END OF TOPIC TEST

Revision for end of topic test.

**DE LA SALLE SCHOOL
ST HELENS
YEAR 8 – SCIENCE: Star Wars
Half Term 4/5/6**



By the end of this half term I will: <ul style="list-style-type: none"> • Know the parts of the solar system and name the planets in order • Understand about gravity and how this affects the weight of an object • Know the difference between mass and weight • Know what is meant by a goldilocks planet • Be able to explain why we have day, night and seasons • Design a space probe • Know the life cycle of a star 		Key Terms I will learn this half term: <ul style="list-style-type: none"> • Solar system • Satellite • Mass • Weight • Gravity • Goldilocks planet • Seasons • Axis • Life cycle
Learning Outcomes	Literacy Focus	Homework
Summer term weeks 1-2 – I will be able to: <ul style="list-style-type: none"> • To construct a diagram of the solar system with the planets in the correct order • Explain the difference between mass and weight 	Spelling	Will be appropriate to the lessons and level of the pupils but an example might be: Construct a scale model of the solar system.
Summer term weeks 3-4 – I will be able to: <ul style="list-style-type: none"> • Explain what is meant by a goldilocks planet. • Explain why Earth is described as a goldilocks planet • Explain day, night and seasons 	Spelling	Will be appropriate to the lessons and level of the pupils but an example might be: Complete a solotaxonomy task to explain why we have day, night and seasons.
Summer term weeks 5-6 – I will be able to: <ul style="list-style-type: none"> • Explain the difficulties of exploring space • Design a space probe • Describe the life cycle of a star END OF TOPIC TEST	Spelling	Will be appropriate to the lessons and level of the pupils but an example might be: Draw a timeline for the life cycle of a star. Revision for end of topic test.

**DE LA SALLE SCHOOL
ST HELENS
YEAR 9 – COMBINED SCIENCE
Half Term 5**



This half term I am focusing on:

- Transport systems
- Circulatory system
- Gaseous exchange
- Heart
- Blood
- Leaves
- Metals and non-metals
- Electron structure
- Chemical bonds
- Bonding
- Forces and acceleration
- Momentum
- Newton's third law

By the end of this half term I will:

- Be able to explain the movement of substances in and out of these cells and the transport of substances around the body
- Be able to represent both ionic and covalent bonding using dot-and-cross diagrams
- Learn about what forces are and what they do, contact and non-contact forces, how force can cause acceleration (and deceleration), how motion can be calculated and Newton's three laws of motion

Outcome:

- Link the structure of the different components of the circulatory system to their functions
- Explain how the structure of substance relate to their properties
- Apply Newton's laws of motion when explaining momentum and collisions

Key terms I will learn this half term:

- Double circulation
- Lumen
- Valves
- Alveoli
- Aorta
- Atrium
- Ventricle
- Plasma
- Red blood cells
- Epidermal tissues
- Palisade mesophyll
- Spongy mesophyll
- Ionic bonding
- Covalent bonding
- Electrons
- Resultant force
- Equilibrium
- Free-body diagram
- Inertia
- Momentum
- Crumple zones
- Conservation of momentum
- Newton's second law
- Newton's third law
- Force pair

Learning Outcomes

In week 1 – 2 I will be learning how to...

- Describe the need for transport systems and the importance of exchange surfaces
- Identify and explain how the structure of each part of the circulatory system relates to its function
- Explain how the human gas exchange surface is adapted to its function
- Describe the structure and function of the heart
- Identify the parts of the blood and explain how red blood cells and haemoglobin transport oxygen efficiently
- Explain how the structure of a leaf is adapted for photosynthesis

Literacy Focus

Include the key terms when answering examination questions.

Homework

Worksheet B2.9

In week 3-4 I will be learning how to...

- Distinguish metals from non-metals using their physical and chemical properties

Include the key terms when answering

Worksheet C2.9

<ul style="list-style-type: none"> • Describe the arrangement of electrons in shells or energy levels • Describe the three main types of bonding and how electrons are used in each 	examination questions.	
<p>In week 5-6 I will be learning how to...</p> <ul style="list-style-type: none"> • Draw free-body diagrams to find resultant forces • Explain what happens to the motion of an object when the resultant force is not zero • Explain what is meant by momentum • Apply ideas about the rate of change of momentum to safety features in cars • Use momentum calculations to predict what happens in a collision • Plan an investigation to explore an idea • Understand and be able to apply Newton's third law 	Include the key terms when answering examination questions.	Worksheet P2.9

**DE LA SALLE SCHOOL
ST HELENS
YEAR 9 – BIOLOGY
Half Term 5**



This half term I am focusing on:

- Transport systems
- Circulatory system
- Gaseous exchange
- Heart
- Blood
- Leaves

By the end of this half term I will:

- Be able to explain the movement of substances in and out of these cells and the transport of substances around the body
- Describe the components and functions of the circulatory system
- Understand how a leaf is adapted for photosynthesis

Outcome:

- Link the structure of the different components of the circulatory system to their functions
- Can describe how a leaf is adapted for photosynthesis

Key terms I will learn this half term:

- Double circulation
- Lumen
- Valves
- Alveoli
- Aorta
- Atrium
- Ventricle
- Plasma
- Red blood cells
- Epidermal tissues
- Palisade mesophyll
- Spongy mesophyll
- Photosynthesis

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Describe the need for transport systems and the importance of exchange surfaces • Identify and explain how the structure of each part of the circulatory system relates to its function 	Include the key terms when answering examination questions.	Worksheet B2.9
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Explain how the human gas exchange surface is adapted to its function • Describe the structure and function of the heart 	Include the key terms when answering examination questions.	Worksheet B2.11
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Identify the parts of the blood and explain how red blood cells and haemoglobin transport oxygen efficiently • Explain how the structure of a leaf is adapted for photosynthesis 	Include the key terms when answering examination questions.	Worksheet B2.13

**DE LA SALLE SCHOOL
ST HELENS
YEAR 9 – CHEMISTRY
Half Term 5**



This half term I am focusing on:

- Metals and non-metals
- Electron structure
- Chemical bonds
- Bonding

By the end of this half term I will:

- Understand the differences between metals and non-metals
- Be able to draw atoms with sub-atomic particles
- Be able to represent both ionic and covalent bonding using dot-and-cross diagrams

Outcome:

- Explain how the structure of covalent and ionic substances relate to their properties
- Link the properties of metals and non-metals to their properties

Key terms I will learn this half term:

- Metals
- Non-metals
- Ionic bonding
- Covalent bonding
- Electrons
- Protons
- Neutrons

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Distinguish metals from non-metals using their physical and chemical properties. 	Include the key terms when answering examination questions.	Worksheet C2.9
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Describe the arrangement of electrons in shells or energy levels. 	Include the key terms when answering examination questions.	Worksheet C2.13
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Describe the three main types of bonding and how electrons are used in each. 	Include the key terms when answering examination questions.	Worksheet C2.16

**DE LA SALLE SCHOOL
ST HELENS
YEAR 9 – PHYSICS
Half Term 5**



This half term I am focusing on:

- Forces and acceleration
- Momentum
- Newton's third law

By the end of this half term I will:

- Learn about what forces are and what they do, contact and non-contact forces, how force can cause acceleration (and deceleration), how motion can be calculated and Newton's three laws of motion

Outcome:

- Calculate resultant forces
- Apply Newton's laws of motion when explaining momentum and collisions

Key terms I will learn this half term:

- Resultant force
- Equilibrium
- Free-body diagram
- Inertia
- Momentum
- Crumple zones
- Conservation of momentum
- Newton's second law
- Newton's third law
- Force pair

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Draw free-body diagrams to find resultant forces • Explain what happens to the motion of an object when the resultant force is not zero 	Include the key terms when answering examination questions.	Worksheet C2.9
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Explain what is meant by momentum • Apply ideas about the rate of change of momentum to safety features in cars • Use momentum calculations to predict what happens in a collision 	Include the key terms when answering examination questions.	Worksheet C2.11
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Plan an investigation to explore an idea • Understand and be able to apply Newton's third law 	Include the key terms when answering examination questions.	Worksheet C2.13

**DE LA SALLE SCHOOL
ST HELENS
YEAR 10 – COMBINED SCIENCE
Half Term 5**



This half term I am focusing on:

- The nervous system
- Reflex actions
- The endocrine system
- Human reproduction
- Contraception
- Endothermic and exothermic reactions
- Energy change of reactions
- Oxidation and reduction
- Neutralisation of acids and salt production
- Calculating power
- Series and parallel circuits
- Potential difference and current?

By the end of this half term I will:

- Learn about the structure of different neurones and the endocrine system. Compare and contrast hormonal and nervous responses. Learn to evaluate the use of IVF to promote fertility and the use of contraceptives to control fertility
- Identify exothermic and endothermic changes
- Explain the oxidation and reduction of metals in terms of loss or gain of oxygen or electrons
- Make soluble salts by neutralising acids with metals, metal oxides, carbonates or alkalis and write equations for these reactions
- Distinguish between strong acids and concentrated acids, and explain what happens during neutralisation
- Distinguish between current and potential difference and investigate factors that affect resistance in a circuit
- Investigate power and energy transfers and calculate power

Outcome:

- Link the nervous system to its functions
- Evaluate to use of contraceptives and IVF
- Write word equations and balanced symbol equations for oxidation, reduction and neutralisation reactions
- Use equations to calculate resistance, current, potential difference and power

Key terms I will learn this half term:

- Central nervous system
- Motor neurone
- Receptor
- Reflex action
- Reflex arc
- Endocrine gland
- Endocrine system
- Basal metabolic rate
- Pituitary gland
- Thyroxine
- Adrenaline
- Oestrogen
- Progesterone
- Testosterone
- Mole
- Endothermic
- Exothermic
- Ionic equations
- Oxidation
- Reduction
- Joules
- Watts
- Resistance
- Potential difference
- Current
- Series
- Parallel
- Charge

Learning Outcomes

In week 1 – 2 I will be learning how to...

- Describe the structure and function of the nervous system, and how it is adapted to its functions
- Explain the importance of reflex actions
- Recall that the endocrine system is made up of glands that secrete hormones into the blood
- Understand that automatic control systems may involve nervous responses and chemical responses

Literacy Focus

Include the key terms when answering examination questions.

Homework

Worksheet B3.7

<ul style="list-style-type: none"> Describe the roles of hormones in sexual reproduction Explain how hormones interact in the menstrual cycle Define the purpose of contraception Describe hormonal and non-hormonal methods of contraception Describe the advantages and disadvantages of different contraceptive methods. Use data to evaluate the effectiveness of different contraceptive methods 		
<p>In week 3-4 I will be learning how to...</p> <ul style="list-style-type: none"> Use balanced symbol equations to determine the masses of reactants needed or the masses of products expected Identify exothermic and endothermic reactions Use bond energies to describe the energy changes in bond breaking and bond making and explain how a reaction is endothermic or exothermic overall Explain reduction as a gain of electrons and oxidation as loss of electrons and write ionic equations for displacement reactions Describe ways that salts can be made and predict the products formed from given reactants Describe how to make a pure, dry sample of a soluble salt and derive its formula 	Include the key terms when answering examination questions.	Worksheet C3.9
<p>In week 5-6 I will be learning how to...</p> <ul style="list-style-type: none"> Calculate the energy transferred Calculate power Apply the circuit to determine the resistance of combinations of components Understand and be able to apply the concepts of current and potential difference Change the subject of an equation Use the symbols =, <, <<, >>, >, \propto, ~ Recognise how algebraic equations define the relationships between variables Solve simple algebraic equations by substituting numerical values Describe relationships expressed in graphical form 	Include the key terms when answering examination questions.	Worksheet P3.10

**DE LA SALLE SCHOOL
ST HELENS
YEAR 10 – BIOLOGY
Half Term 5**



This half term I am focusing on:

- The nervous system
- Reflex actions
- The endocrine system
- Human reproduction
- Contraception

By the end of this half term I will:

- Learn about the structure of different neurones and the endocrine system. Understand why reflex actions occur. Compare and contrast hormonal and nervous responses. Learn to evaluate the use of IVF to promote fertility. Learn about the advantages and disadvantages of the different methods of contraception to control fertility

Outcome:

- Link the nervous system to its functions
- Evaluate to use of contraceptives and IVF

Key terms I will learn this half term:

- Central nervous system
- Motor neurone
- Receptor
- Reflex action
- Reflex arc
- Endocrine gland
- Endocrine system
- Basal metabolic rate
- Pituitary gland
- Thyroxine
- Adrenaline
- Oestrogen
- Progesterone
- Testosterone

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Describe the structure and function of the nervous system, and how it is adapted to its functions • Explain the importance of reflex actions • Recall that the endocrine system is made up of glands that secrete hormones into the blood 	Include the key terms when answering examination questions.	Worksheet B3.2
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Understand that automatic control systems may involve nervous responses and chemical responses • Describe the roles of hormones in sexual reproduction • Explain how hormones interact in the menstrual cycle • Define the purpose of contraception 	Include the key terms when answering examination questions.	Worksheet B3.5
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Describe hormonal and non-hormonal methods of contraception • Describe the advantages and disadvantages of different contraceptive methods. Use data to evaluate the effectiveness of different contraceptive methods 	Include the key terms when answering examination questions.	Worksheet B3.7

**DE LA SALLE SCHOOL
ST HELENS
YEAR 10 – CHEMISTRY
Half Term 5**



This half term I am focusing on:

- Endothermic and exothermic reactions
- Energy change of reactions
- Oxidation and reduction
- Neutralisation of acids and salt production

By the end of this half term I will:

- Identify exothermic and endothermic changes
- Explain the oxidation and reduction of metals in terms of loss or gain of oxygen or electrons
- Make soluble salts by neutralising acids with metals, metal oxides, carbonates or alkalis and write equations for these reaction
- Distinguish between strong acids and concentrated acids, and explain what happens during neutralisation

Outcome:

- Recognise when the different types of chemical reactions are occurring, identifying the reactants and the products
- Write word equations and balanced symbol equations for oxidation, reduction and neutralisation reactions

Key terms I will learn this half term:

- Mole
- Endothermic
- Exothermic
- Ionic equations
- Oxidation
- Reduction

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Use balanced symbol equations to determine the masses of reactants needed or the masses of products expected • Identify exothermic and endothermic reactions • Use bond energies to describe the energy changes in bond breaking and bond making and explain how a reaction is endothermic or exothermic overall 	Include the key terms when answering examination questions.	Worksheet C3.9
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Explain reduction as a gain of electrons and oxidation as loss of electrons and write ionic equations for displacement reactions 	Include the key terms when answering examination questions.	Worksheet C3.13
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Describe ways that salts can be made and predict the products formed from given reactants • Describe how to make a pure, dry sample of a soluble salt and derive its formula 	Include the key terms when answering examination questions.	Worksheet P3.17

**DE LA SALLE SCHOOL
ST HELENS
YEAR 10 – PHYSICS
Half Term 5**



This half term I am focusing on:

- Calculating power and energy transfers
- Stored energy
- Series and parallel circuits
- Potential difference and current

By the end of this half term I will:

- Distinguish between current and potential difference and investigate factors that affect resistance in a circuit
- Investigate power and energy transfers and calculate power
- Use algebra in electric circuit calculations
- Describe relationships expressed in graphical form

Outcome:

- Use equations to calculate resistance, current, potential difference and power
- Understand the differences between parallel and series circuits relating to how the components in the circuit are affected
- Be able to rearrange equations with confidence

Key terms I will learn this half term:

- Joules
- Watts
- Resistance
- Potential difference
- Current
- Series
- Parallel
- Charge

Learning Outcomes	Literacy Focus	Homework
In week 1 – 2 I will be learning how to... <ul style="list-style-type: none"> • Calculate the energy transferred • Calculate power • Consider power ratings and changes in stored energy 	Include the key terms when answering examination questions.	Worksheet P3.9
In week 3-4 I will be learning how to... <ul style="list-style-type: none"> • Apply the circuit to determine the resistance of combinations of components • Understand and be able to apply the concepts of current and potential difference 	Include the key terms when answering examination questions.	Worksheet P3.11
In week 5-6 I will be learning how to... <ul style="list-style-type: none"> • Change the subject of an equation • Use the symbols =, <, <<, >>, >, α, \sim • Recognise how algebraic equations define the relationships between variables • Solve simple algebraic equations by substituting numerical values • Describe relationships expressed in graphical form 	Include the key terms when answering examination questions.	Worksheet P3.13