

WALTON HIGH SCHOOL – Year 7 CURRICULUM OVERVIEW FOR BIOLOGY

Half Term 1	Half Term 2	Half Term 3	Half Term 4
<p>Cell Biology <i>How are Plant Cells Different to Animal Cells Under the Microscope?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> How to view objects under the microscope. The differences between plant and animal cells. The adaptations of specialised animal and plant cells. The features of unicellular organisms. <p>HT1 Curriculum Booklet</p>	<p>Photosynthesis and Plant Physiology <i>How do Plants Make Glucose Using Photosynthesis?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> The reactants and products of photosynthesis. The structure of the leaf. <p>Ecology <i>How does Energy Flow through Ecosystems?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> The relationships between organisms in food chains and webs. How food chains can become disrupted through human activity. <p>HT2 Curriculum Booklet</p>	<p>Human Physiology <i>How do Muscles Help us Move and Breathe?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> The structure of the human skeleton and different types of joint. How muscles enable movement. The structure of the respiratory system. The mechanism of breathing. <p>Photosynthesis and Plant Physiology <i>How do Plants Spread their Seeds?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> How plants reproduce and spread their seeds. <p>HT3 Curriculum Booklet</p>	<p>Human Physiology <i>How do Humans Make New Life?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> What happens during puberty. The structure of male and female reproductive organs. How sexual intercourse can make a baby. How a baby grows during pregnancy. What happens during birth. <p>Health and Disease <i>How can we Prevent a Pregnancy?</i></p> <p>Students learn...</p> <ul style="list-style-type: none"> How contraception can prevent a pregnancy and transmission of STDs.
<p>Want to know more?</p> <ul style="list-style-type: none"> HT1 Essential Knowledge HT1 Essential Skills HT1 Essential Vocabulary HT1 Knowledge Organiser HT1 Home Learning Resources HT1 Podcast HT1 Revision Video 	<p>Want to know more?</p> <ul style="list-style-type: none"> HT2 Essential Knowledge HT2 Essential Skills HT2 Essential Vocabulary HT2 Knowledge Organiser HT2 Home Learning Resources HT2 Podcast HT1 Revision Video 	<p>Want to know more?</p> <ul style="list-style-type: none"> HT3 Essential Knowledge HT3 Essential Skills HT3 Essential Vocabulary HT3 Knowledge Organiser HT3 Home Learning Resources HT3 Podcast HT1 Revision Video 	<p>Want to know more?</p> <ul style="list-style-type: none"> HT4 Essential Knowledge HT4 Essential Skills HT4 Essential Vocabulary HT4 Knowledge Organiser HT4 Home Learning Resources HT4 Podcast HT1 Revision Video

WALTON HIGH SCHOOL – Year 7 CURRICULUM OVERVIEW FOR CHEMISTRY

Half Term 1	Half Term 2	Half Term 3	Half Term 4
<p>Elements and Compounds <i>How are particles arranged in Solids, Liquids and Gases?</i></p> <p>Lesson 1 <i>Solids Liquids and Gases</i></p> <p>Lesson 2 <i>Modelling Solids, Liquids and Gases</i></p> <p>Lesson 3 <i>Compounds</i></p> <p>Lesson 4 <i>Mixtures</i></p> <p>Lesson 5 <i>Diffusion and Pressure</i></p> <p><u>HT1 Curriculum Booklet</u></p> 	<p>Elements and Compounds <i>How can we Separate Mixtures?</i></p> <p>Lesson 1 <i>Solutions</i></p> <p>Chemical Change</p> <p>Lesson 2 <i>Investigating Reactions</i></p> <p>Lesson 3 <i>Scientific Experiment</i></p> <p>Quantitative Analysis</p> <p>Lesson 4 <i>Chromatography</i></p> <p>Lesson 5 <i>Forensic Science Investigation</i></p> <p>Lesson 6 <i>Distillation</i></p> <p><u>HT2 Curriculum Booklet</u></p>	<p>Earth's Resources <i>What is the Rock Cycle?</i></p> <p>Lesson 1 <i>The structure of Earth</i></p> <p>Lesson 2 <i>Weathering</i></p> <p>Lesson 3 <i>Types of Rock</i></p> <p>Lesson 4 <i>The Rock Cycle</i></p>  <p>Element and Compounds <i>How can we use Separation Techniques to obtain Salt from Rock Salt?</i></p> <p>Lesson 5 <i>Separating rock salt</i></p> <p><u>HT3 Curriculum Booklet</u></p>	<p>Earth's Resources <i>How are Humans Impacting Our Atmosphere?</i></p> <p>Lesson 1 <i>Atmospheric Gases</i></p> <p>Lesson 2 <i>Global Warming</i></p> <p>Lesson 3 <i>Reduce, Reuse, Recycle</i></p> <p>Lesson 4 <i>The Carbon Cycle</i></p> <p>Lesson 5 <i>The Water Cycle</i></p> <p>HT4 Curriculum Booklet</p> 
<p>Want to know more?</p> <ul style="list-style-type: none"> <u>HT1 Essential Knowledge</u> <u>HT1 Essential Skills</u> <u>HT1 Essential Vocabulary</u> <u>HT1 Knowledge Organiser</u> <u>HT1 Home Learning Resources</u> HT1 Revision Video and Podcast 	<p>Want to know more?</p> <ul style="list-style-type: none"> <u>HT2 Essential Knowledge</u> <u>HT2 Essential Skills</u> <u>HT2 Essential Vocabulary</u> <u>HT2 Knowledge Organiser</u> <u>HT2 Home Learning Resources</u> <u>HT2 Revision Video</u> 	<p>Want to know more?</p> <ul style="list-style-type: none"> <u>HT3 Essential Knowledge</u> <u>HT3 Essential Skills</u> <u>HT3 Essential Vocabulary</u> <u>HT3 Knowledge Organiser</u> <u>HT3 Home Learning Resources</u> HT3 Revision Video 	<p>Want to know more?</p> <ul style="list-style-type: none"> HT4 Essential Knowledge HT4 Essential Skills HT4 Essential Vocabulary HT4 Knowledge Organiser HT4 Home Learning Resources

WALTON HIGH SCHOOL – Year 7 CURRICULUM OVERVIEW FOR **PHYSICS**

Half Term 1

Energy

What are the 9 Types of Energy?

Lesson 1

Types of Energy

Lesson 2

Energy Transfers

Lesson 3

Gravitational and Kinetic energy

Lesson 4

Thermal Conduction

Lesson 5

Convection and Radiation

Lesson 6

Energy Resources for Electricity

Lesson 7

Food and Fuel

[HT1 Curriculum Booklet](#)



Half Term 2

Forces

What are Forces and their Effects?

Lesson 1

Introduction to Forces

Lesson 2

Force Diagrams and Resultant Forces

Lesson 3

Friction

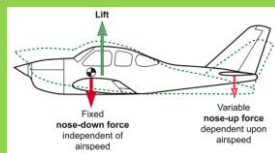
Lesson 4

Balance and Unbalanced Forces

Lesson 5

Pressure, Floating and Sinking

[HT2 Curriculum Booklet](#)



Half Term 3

Sound

How do Waves Transfer Sound Energy?

Lesson 1

Introduction to Waves

Lesson 2

Sound and the Ear

Lesson 3

Speed of Sound

Lesson 4

Sound and Ultrasound

Lesson 5

Waves

[HT3 Curriculum Booklet](#)



Half Term 4

Electricity

How Does Current relate to Resistance?

Lesson 1

Static Electricity

Lesson 2

Circuit Symbols and Diagrams

Lesson 3

Series and Parallel Circuits

Lesson 4

Ohm's Law

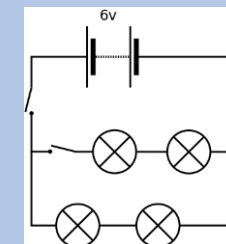
Lesson 5

Resistance

Lesson 6

Generating Electricity

[HT3 Curriculum Booklet](#)



Want to know more?

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