


| Learning Plan | | Subject: science | Year: 7 | |
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| <p>Knowledge focus/What matters: Being curious and searching for answers is essential to understanding and predicting phenomena The world around us is full of living things which depend on each other for survival.</p> | | <p>4 Purposes: Ambitious Capable Learners, Enterprising Creative, Contributors, Ethical Informed Citizens, Healthy Confident Individuals</p> <p>Our Vision: At Prestatyn High School, we are creating learners who: ASPIRE to great things; Have a desire to CREATE and be enterprising; Are inspired to LEARN new and interesting things; THINK for themselves and make good choices; Are encouraged to GROW in confidence, health and understanding; ACHIEVE goals which will set them up for their whole lives; ENJOY learning, now and through the rest of their lives.</p> | | |
| | |  Ysgol Uwchradd Prestatyn High School | | |
| Learning Objective/Big Question | Learning activities | I can... | Skills (Integral, Literacy, Numeracy, Digital Competency) | Homework |
| <p>Week 1 What are the safety rules and how we carry them out in our labs?</p> | <ul style="list-style-type: none"> Safety awareness 'unsafe cartoon' Laboratory procedures 'safety rules' New surroundings and its features Alka- seltzer experiment | <p>I can understand how my actions and the actions of others impact on our environment (the lab). I can explore the environment, make observations and communicate my ideas.</p> | <p><i>Cooperative groupwork</i> <i>Observing</i></p> | <p>Create a poster of safety rules in the lab</p> |
| <p>Week 2 What equipment do we use to measure in science?</p> | <ul style="list-style-type: none"> Make observations and measurements Use a range of equipment including the use of ICT for datalogging (measuring circus activities). Using a thermometer (boiling water). Finding the volume of a pebble using a measuring cylinder. | <p>I can safely use a range of equipment that can be used in scientific investigations.</p> | <p><i>Reading scales</i> <i>Use of ICT for datalogging</i></p> | |
| <p>Week 3 How do you plan a fair test?</p> | <ul style="list-style-type: none"> How does the length of an elastic band depend upon the weights hanging from it? How does your pulse rate depend upon the amount of exercise you do? How does the height that a ball bounces depend upon the surface that it bounces on? | <p>I can identify questions that can be investigated scientifically and suggest suitable methods of enquiry. I can consider key factors that need to be taken in to account and decide upon the extent and range of data to be collected.</p> | <p><i>Identifying variables</i> <i>Planning an investigation</i></p> | <p>Forms quiz on apparatus & measuring</p> |
| <p>Mid-term Formative Feedback point</p> | | | | |

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| <p>Week 4: Planning an investigation and carrying out a full investigation.</p> | <ul style="list-style-type: none"> Investigating the variables that affect the time it takes a pendulum to swing. Carry out a full investigation. | <p>I can identify questions that can be investigated scientifically and suggest suitable methods of enquiry.</p> <p>I can suggest conclusions as a result of carrying out my enquiries.</p> | <p><i>Planning a fair test-Cooperative group work Literacy task-identifying variables and writing a method</i></p> | |
| <p>Week 5: Develop and assess your Investigating skills.</p> | <ul style="list-style-type: none"> Investigating by a fair test- 'tearing tissues' or 'Getting soaked' Using scientific Knowledge to turn ideas into a form that can be investigated. | <p>I can use my knowledge and understanding to ask questions that can be investigated scientifically and suggest suitable methods of enquiry.</p> <p>I can use a range of equipment and materials safely</p> <p>I can make observations and measurements to obtain reliable evidence and draw conclusions.</p> | <p><i>Predicting, planning, observing, measuring, interpreting, concluding and communicating</i></p> | <p>Safety symbols in the home/local environment</p> |
| <p>Week 6: Other ways of investigation.</p> | <ul style="list-style-type: none"> Introduce the world around us and living things by carrying out the activity 'Woodlice in the wild' | <p>I can collect evidence in different contexts (fieldwork, surveys, books, internet)</p> | <p><i>Concluding and evaluating</i></p> | |
| <p>Week 7: Cells are the living units that make up the bodies of plants and animals.</p> | <ul style="list-style-type: none"> Learn the structure of plant and animal cells. Learn the functions of the parts of the cells. Look at cheek cells, onion cells and water fleas from the school pond under a microscope. | <p>I can identify and describe the features of a plant and animal cell.</p> | <p>Using a microscope, observing and making a slide.</p> | <p>Make a model cell.</p> |

Learning Progress Assessment