



Yr hanner tymor hwn: Sgiliau, Gwybodaeth a Dealltwriaeth i'w ddatblygu;

During this half term: Skills, Information and Understanding to be developed;

Unit 10.2: Number 1

Unit 10.2 is a number unit that concentrates on place value, estimation, Venn diagrams, directed numbers and indices. The learning outcomes show aspects at foundation level in normal text, intermediate in underlined normal text and **higher in bold and underlined text**.

Geiriau / Termau Allweddol;

Key Terms / Words;

Integers (whole numbers), place value, decimals, significant figures, estimation, Venn diagrams, highest common factors, lowest common multiple, negative numbers, prime numbers, square numbers, square root, third root, reciprocal, index, standard form.

Deilliannau Dysgu / Learning Outcomes

Asesiad / Assessment

Meini Prawf Llywyddiant / Success Criteria

Gwaith Cartref / Homework

| Deilliannau Dysgu / Learning Outcomes | Asesiad / Assessment | Meini Prawf Llywyddiant / Success Criteria | Gwaith Cartref / Homework |
|--|----------------------|---|--|
| <p>Deilliannau Dysgu Wythnos 1 / Week 1 Learning Outcomes</p> <ul style="list-style-type: none"> Reading and writing whole numbers of any magnitude expressed in figures or words. Rounding whole numbers to the nearest 10, 100, 1000, etc Understanding place value and decimal places. Rounding decimals to the nearest whole number or a given number of decimal places. <u>Rounding numbers to a given number of significant figures.</u> | | <ul style="list-style-type: none"> Place value and rounding | <ul style="list-style-type: none"> Homework 1 [Rounding] |
| <p>Deilliannau Dysgu Wythnos 2 / Week 2 Learning Outcomes</p> <ul style="list-style-type: none"> Estimating and approximating solutions to numerical calculations. Using estimation in multiplication and division problems with whole numbers to obtain approximate answers, <u>e.g. by first rounding the numbers involved to 1 significant figure.</u> Candidates must show sufficient working in order to demonstrate how they have obtained their estimate. | | <ul style="list-style-type: none"> Estimation | <ul style="list-style-type: none"> Homework 2 [Estimation] |
| <p>Deilliannau Dysgu Wythnos 3 / Week 3 Learning Outcomes</p> <ul style="list-style-type: none"> Understanding and using Venn diagrams to solve problems. E.g. What is the highest common factor and least common multiple of 144 and 60? Understand and use directed numbers, including ordering directed numbers (positive and negative). Addition, subtraction, multiplication and division of negative numbers. | | <ul style="list-style-type: none"> Venn diagrams Directed numbers | <ul style="list-style-type: none"> Homework 3 [Venn diagrams or directed numbers] |
| <p>Deilliannau Dysgu Wythnos 4 / Week 4 Learning Outcomes</p> <ul style="list-style-type: none"> Using the common properties of numbers, including odd, even, multiples, factors, primes. <u>Least common multiple and highest common factor.</u> Using the terms square, square root, cube, cube root and reciprocal. | | <ul style="list-style-type: none"> Numbers properties | <ul style="list-style-type: none"> Homework 4 [Numbers properties] |
| <p>Deilliannau Dysgu Wythnos 5 / Week 5 Learning Outcomes</p> <ul style="list-style-type: none"> Using the index rules. Writing whole numbers in index form. The use of index notation for zero, positive and negative integers. Expressing numbers as the product of their prime factors in index form. | | <ul style="list-style-type: none"> Standard index rules | <ul style="list-style-type: none"> Homework 5 [Standard index rules] |

Deilliannau Dysgu Wythnos 6 / Week 6 Learning Outcomes

- Finding the least common multiple and highest common factor of numbers written as the product of their prime factors in index form.
- The use of index notation for positive unit fractional and **other fractional indices.**
- Expressing and using numbers (+, -, ÷, ×) in standard form with positive and negative powers of 10. Interpreting numbers written in standard form in the context of a calculator display.

- Index rules for intermediate and higher tier

- Homework 5 [Index rules for intermediate and higher tier]

Deilliannau Dysgu Wythnos 7 / Week 7 Learning Outcomes

- **ASSESSMENT TASK 2** – Revision of learning outcomes for unit 10.2 and receive class test.

- End of Unit 10.2 class test.

- Review the result of the class test for unit 10.2.
- Reflect on the success criteria for unit 10.2 and note any progress.

- Revise for unit 10.2 test.