

Y PUM HYFEDREDD

- esbonio cysyniadau mathemategol, e.e. ar lafar/ trwy ddefnyddio diagram / offer / enghreifftiau neu aneghreifftiau
- cynrychioli cysyniad mewn sawl gwahaniol ffordd, e.e. yn ddiriaethol/ gweledol/ digidol / haniaethol
- gwneud cysylltiadau i gysyniadau a syniadau eraill o fewn mathemateg
- trosglwyddo a defnyddio cysyniad mewn cyd-destunau newydd yn mathemateg, ar draws y cwricwlwm ac o fewn sefyllfaoedd bywyd bob dydd

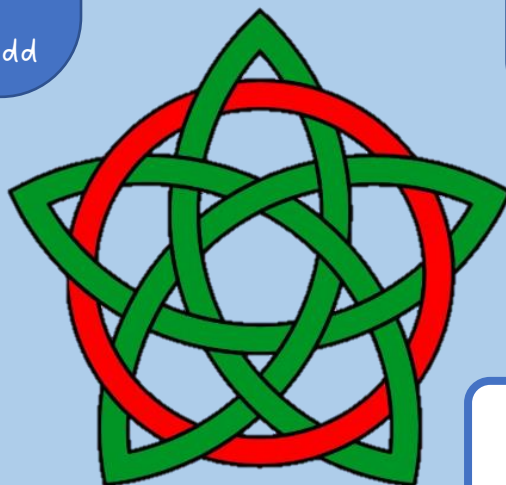
Dealltwriaeth gysyniadol

Rhuglder

- cofio feithiau, perthnasoedd a dulliau
- gwybod sut a phryd y mae'n briodol i'w defnyddio yn gywir, yn effeithlon ac yn hyblyg

Cymhwysedd strategol

- adnabod beth sydd angen i ddatrys problem, e.g. gweithdrefn (+, -, x, ÷), cyfres o gamau a dulliau
- Cymhwyso'r mathemateg sydd ei angen er mwyn datrys y problem



- esbonio syniadau a phenderfyniadau, e.e. gan ddefnyddio iaith, lluniau, diagramau, nodiadau (jottings) anffurfiol a symbolau, fel bod eraill yn gallu gwneud sens o'r gwaith
- cyfiawnhau a phrofi trwy gynnig rhesymau, darbwyllo a dangos i eraill, e.e. gan symud o esboniadau llafar → cynrychioliadau gweledol neu ddiriaethol → gynrychioliadau haniaethol (symbolau a chonfensiynau)
- gwirio canlyniadau neu ddatrysiadau, e.e. gan amcangyfrif, ystyried pa mor synhwyrol yw datrysiadau, a dehongli atebion yng nghydestun y broblem

Rhesymu rhesymegol

Cyfathrebu gan ddefnyddio symbolau

- deall bod symbolau yn gynrychioliadau haniaethol
- dewis a defnyddio nodiant ac amrediad gynyddol o symbolau yn gywir
- mynegi perthnasoedd mewn ffurf cryno, ac mewn ffurf mae pawb yn ei deall
- cynnwys unedau mesur priodol

THE FIVE PROFICIENCIES

- explain mathematical concepts, e.g. verbally/ using diagrams / resources / examples / counter-examples
- represent concepts in different ways, e.g. using verbal / concrete / visual / digital / abstract representations
- make connections to other concepts / ideas within Maths
- transfer and use concepts in new contexts within Maths, across the curriculum and within everyday situations

Conceptual understanding

- explain ideas and decisions, e.g. using language, pictures, diagrams, informal notes/jottings, and symbols, so that others can make sense of the work
- justify and prove by giving reasons, convincing or showing others, e.g. moving from verbal explanations $\rightarrow$ visual or concrete representations $\rightarrow$ abstract representations (symbols and conventions).
- checking results or solutions, e.g. by estimating, deciding whether solutions are reasonable or sensible, interpreting answers in the context of a problem

Logical reasoning

Communication using symbols

- understand that symbols are abstract representations
- choose and use notation and an increasing range of symbols correctly
- express relationships concisely, in forms that are universally understood
- include appropriate units of measurement

Fluency

- recall facts, relationships and methods
- know how and when it's appropriate to use them accurately, efficiently and flexibly

Strategic competence

- identify what is required to solve a problem, e.g. operation (+, -, $\times$, $\div$), series of steps and methods
- apply the mathematics needed to solve a problem

