

Wales Maths Week



Children from Sirhowy Infants School practice their cookery skills at their Maths Week 'Cookathon'.

Wales Maths Week 2003 promised to be even more successful than in 2002, and reports from all those involved confirm that it was! The week was celebrated across the whole of Wales with special mathematical events, workshops, visits and lectures at numerous schools and other venues, and involving a wide cross-section of people.

The week started off with an official launch at Techniquet in Cardiff Bay by Jane Davidson AM, Minister for Education and Lifelong Learning, in a special event also involving pupils from a local secondary school. This event signalled the start of a busy and varied week of mathematical activities throughout the whole of Wales. Fifty schools in Wales received grants to help fund their own

events, and the mathcymru team was delighted to be able to visit some of these schools to see how maths was being promoted in imaginative and fun ways. Activities ranged from games and puzzle days, maths treasure hunts, quizzes and even a cookathon with many of these activities involving the whole school, parents and the wider community.

mathcymru also sponsored three maths communicators, Paul Godding, Paul Stephenson and Selwyn van Zeller to run maths workshops in selected schools throughout Wales.

Over 1700 visitors to Techniquet in Cardiff Bay enjoyed the extra mathematical puzzles, mazes and games on offer in the exhibition during the two weekends on either side of Wales Maths Week.

And finally the jewel in the Maths Week crown was the annual mathcymru lectures by two leading mathematics professors, Marcus du Sautoy from Oxford University and Christopher Budd from Bath University. This year, in an expanded programme, the lectures were

held in Swansea, Aberystwyth, Wrexham and Caerleon. Between them over 700 people, ranging from KS4 and sixth form pupils, to university students and the general public, were treated to two engrossing and thought-provoking lectures.

The mathcymru team is delighted with the positive response that Wales Maths Week 2003 has received from everyone involved and is looking forward to building on this success for Wales Maths Week 2004 (October 11-15).



Jane Davidson AM, launches Wales Maths Week with the assistance of Colin Johnson, CEO of Techniquet, and the mathematics skills of pupils from Cardiff High School.

Maths in Motion (MIM) MathMagic

The entries are all in for this year's mathcymru MIM competition, and the regional winners have been selected. The date for the Grand Final is 12th February, and the winning teams will be invited to Techniquet Science Discovery Centre, in Cardiff Bay, in order to compete. They will be given a set track and two hours to practice and fine-tune the set-ups of their cars. Then they'll be off and racing against each other, and may the best team win, because mathcymru have some excellent prizes to give away. But whatever the result, all the entrants will have a great day out, with goodies supplied by Jaguar, and real racing simulators to get

them in the Formula 1 frame of mind. Furthermore, Jane Davidson AM, Minister for Education and Lifelong Learning has kindly agreed to officiate and wave the chequered flag.



Jane Davidson yn chwifio'r faner i gyfarch enillwyr y gystadleuaeth Mathemateg ar Wib y llynedd.

mathcymru have teamed up with Paul Godding Ltd, the Maths Games and Puzzles company, to run a KS2 competition in Gwynedd and Ynys Môn. The competition will be based on the Math Magic board game that Paul Godding Ltd supply, and, if successful, there are plans to roll-out the competition across Wales. As one of the better numeracy board games on the market, MathMagic can best be described as a mathematical version of 'Scrabble'. The concept behind the game is very similar to the world-famous word game, but utilises numbers instead of letters. Constant playing of MathMagic not only helps children improve their mathematical skills but also builds confidence in mastering basic numeracy. It can also result in players working up to 1500 mental calculations per game, without even realising they have done so. Children can develop strategic thinking skills at a very young age, as players learn to evaluate every move and calculation in order to improve their scores, or to prevent their opponents from scoring. Most importantly, it gives the players hours of fun! Schools interested in entering such a competition can contact mathcymru through our website. Paul Godding can be found at www.paulgodding.com.

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NRICH

The dates and venues for this year's NRICH tour have been finalised. mathcymru is once again delighted to invite the NRICH team back to Wales. NRICH is part of the Millennium Mathematics Project, based at Cambridge University Department of Education, and the project aims to enrich mathematical experiences by giving students the opportunity to explore and engage with mathematical ideas. They will be running workshops around Wales for lucky Year 8 pupils, coordinated and funded by mathcymru. More information about NRICH's activities can be accessed through the links section in our website (www.mathcymru.org) where it is also possible to register your school's interest in hosting future workshops.



Whiteboard

This term should see the mathcymru interactive whiteboard teaching package release. The resource has been made possible through a GTCW network grant, which allowed four pairs of teachers from across Wales to develop flipchart lessons for four topics from the Maths Curriculum, with the kind assistance of Promethean. It will be possible to download the package from the Promethean website, which can be accessed through a link on the mathcymru website. mathcymru will also be putting them on a CD for distribution to schools in Wales. The teaching package is very useful as a framework for teachers to develop their own individual lessons and, with its video help section, can assist teachers who are less familiar with the technology. The lessons are cross-phase, and are aimed at KS2/KS3. The next step is for mathcymru to get the resources adapted for other whiteboards, such as Smart and Hitachi, so that all Welsh schools will be able to benefit.

"All About Us" Competition for KS1

mathcymru recently trialed a new maths competition for KS1 in primary schools in the Vale of Glamorgan and, due to the success of the trial, will now be running the competition throughout Wales on an area-by-area basis. The competition is a class activity and schools will be able to submit one entry for each KS1 class. The winning school will receive a visit from a maths communicator for a day. Further details on each area competition will follow via your LEA numeracy advisor and will also be posted on the mathcymru website.



Data handling display entered by Holton Primary School in the 'All About Us' competition

mathcymru roadshows

This year mathcymru will be increasing the frequency of the popular roadshows. A roadshow typically consists of a suite of hands-on activities and exhibits, coupled with an entertaining presentation from one of the team. The presentations are geared to KS3 (a show about probability) or KS2 (a Maths Whodunit), but the activities are fun for all ages, consisting, as they do, of many games, puzzles and tests of logic. All the activities have bilingual instructions and labels, and the KS3 show can also be presented in Welsh. Gareth Smith, National Coordinator of mathcymru said "This year we want to take the fun side of Maths to as many areas in Wales as possible. We are already in discussions with the Urdd for slots at their camps (Glanllyn and Llangrannog) and, of course, the Eisteddfod, but this year we thought that we'd try another



A youngster shows that it's never too early to start investigating maths puzzles at a mathcymru roadshow.

tack as well. Ideally we would like secondary schools to volunteer to host the roadshow, which is free, and will be available to the school's pupils, but also to allow primary children from their feeder schools to have access. This way many children from the area will benefit, schools will strengthen links to their feeders, and mathcymru get to perform both of their shows - an excellent arrangement!"

Any Maths teachers interested in hosting the mathcymru roadshow should contact us through the website.

REMEMBER
Wales Maths Week 2004
11 - 15 October
See www.mathcymru.org
for more details.

mathcymru Website

Keep up to date with news from mathcymru by visiting our website on www.mathcymru.org. Our website is updated continually with details of forthcoming events, projects and funding for schools, competitions and mathematical resources. Need advice or want to pass on useful teaching tips and resources? Our website also has a noticeboard which gives all browsers an opportunity to post articles and engage in discussion with other website users and the mathcymru team.

www.mathcymru.org

For more information contact:

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Llywodraeth Cynulliad Cymru
Welsh Assembly Government

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Wythnos Fathemateg Cymru



eu hunain, ac roedd tîm mathcymru yn falch dros ben o gael y cyfle i ymweld â rhai o'r ysgolion hyn i gael golwg ar y ffordd mae mathemateg yn cael ei hyrwyddo trwy ddulliau dyfeisgar a hwyliog. Roedd yr amrywiaeth o weithgareddau'n cynnwys dyddiau gemau a phosau, helfeydd trysor mathemategol, cwisiau, a hyd yn oed un "coginiothion", gyda nifer o'r gweithgareddau hyn yn cynnwys yr ysgol gyfan, y rhieni a hefyd y gymuned leol.

Roedd argoel y byddai Wythnos Fathemateg Cymru 2003 yn fwy o lwyddiant hyd yn oed na'r 2002, ac mae adroddiadau pawb a fu'n ymwneud â'r wythnos yn cadarnhau hynny! Dathlwyd yr wythnos trwy Gymru benbaladr ar ffurf digwyddiadau, gweithdai, ymweliadau a darlithoedd mathemategol mewn nifer fawr o ysgolion a lleoliadau eraill, a chymerwyd rhan gan groestoriad eang o bobl.

Daeth rhagor na 1700 o ymwelwyr i Techniquet ym Mae Caerdydd i fwynhau'r posau, y drysfeydd a'r gemau mathemateg a oedd ar gael i'w mwynhau yn y brif arddangosfa yn ystod y ddau benwythnos ar y naill ochr a'r llall i Wythnos Fathemateg Cymru.

Roedd mathcymru hefyd wedi noddi tri chyfathrebwr mathemategol, sef Paul Godding, Paul Stephenson a Selwyn van Zeller, i gynnal gweithdai mathemateg mewn nifer o ysgolion a ddewiswyd ledled Cymru.

Ac yn olaf, i goroni'r Wythnos Fathemateg, traddodwyd darlithoedd blynyddol mathcymru gan ddau fathemategydd o fri, sef Yr Athro Marcus du Sautoy o Brifysgol Rhydychen a'r Athro

Christopher Budd o Brifysgol Caerfaddon. Eleni, mewn rhaglen a estynnwyd, cynhaliwyd y darlithoedd yn Abertawe, Aberystwyth, Wrecsam a Chaerllion. Yn gyfan gwbl, cafodd dros 700 o bobl, yn amrywio o ddisgyblion CA4 a chweched dosbarth, i fyfyrwyr prifysgol a'r cyhoedd yn gyffredinol, glywed dwy ddarlith wefreiddiol a oedd yn her i'r meddwl a'r dychymyg.

Mae tîm mathcymru wrth ei fodd o weld yr ymateb cadarnhaol a dderbyniodd Wythnos Fathemateg Cymru 2003 oddi wrth bawb a gymerodd ran, ac yn edrych ymlaen at allu adeiladu ar y llwyddiant hwn wrth drefnu Wythnos Fathemateg Cymru 2004 (11-15 Hydref).

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Jane Davidson AC, yn lansio Wythnos Fathemateg Cymru gyda chefnogaeth Colin Johnson, Prif Weithredwr Techniquet, a sgiliau mathemateg disgyblion Ysgol Uwchradd Caerdydd.

efelychyddion rasio go iawn, y cyfan yn rhoi naws a hwy! Fformiwla Un i bawb. Yn ogystal, mae Jane Davidson AC, y Gweinidog dros Addysg a Dysgu Gydol Oes wedi cytuno'n garedig iawn i fod yn bresennol a chwifio'r faner a fydd yn dyfarnu enillydd y ras.

Hud a Lledrith Mathemategol

Mae mathcymru wedi ffurfio partneriaeth â Paul Godding Cyf., y cwmni Gemau a Phosau Mathemategol, er mwyn cynnal cystadleuaeth CA2 yng Ngwynedd ac Ynys Môn. Caiff y gystadleuaeth ei seilio ar y gêm fwrdd Math Magic a gynhyrchir gan gwmni Paul Godding Cyf., ac os bydd y fenter yn llwyddiant yna mae cynlluniau i ledaenu'r gystadleuaeth i bob cwr o Gymru.

MathMagic yw un o'r goreuon ymysg y gemau bwrdd ar rifedd, a'r ffordd orau i'w disgrifio yw fel fersiwn mathemategol o Scrabble. Gall ysgolion sydd â diddordeb mewn cymryd rhan mewn cystadleuaeth o'r fath gysylltu â mathcymru trwy gyfrwng ein gwefan.

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NRICH

Penderfynwyd ar ddyddiadau a lleoliadau taith NRICH am eleni.



Unwaith eto mae mathcymru yn falch o gael croesawu tîm NRICH yn ôl i Gymru. Mae NRICH yn rhan o Brosiect Mathemateg y Mileniwm, sydd wedi ei leoli yn Adran Addysg Prifysgol Caergrawnt, a'u nod yw cyfathrogi profiadau mathemategol disgyblion a myfyrwyr trwy roi'r cyfle iddynt archwilio a rhoi cynnig ar syniadau mathemategol. Byddant yn cynnal cyfres o weithdai ledled Cymru i ddisgyblion ffodus Blwyddyn 8, y cyfan yn cael ei gyflwynu a'i gyllido gan mathcymru. Gellir casglu rhagor o wybodaeth am weithgareddau NRICH o'u gwefan ac mae mynediad i'r gwefan honno trwy ein hadran gysylltiadau ar ein gwefan ni (www.mathcymru.org). Yn y gwefan bydd cyfle i chi hefyd gofnodi eich diddordeb os hoffai eich ysgol chi fod yn lleoliad gweithdai o'r fath yn y dyfodol.

Bwrdd Gwyn

Dylai pecyn addysgu mathcymru ar gyfer y bwrdd gwyn rhyngweithiol gael ei ryddhau yn ystod y tymor hwn. Bu'n bosibl creu'r deunydd hwn trwy dderbyn grant rhydwaiith Cyngor Addysgu Cyffredinol Cymru, sydd wedi galluogi pedwar pâr o athrawon o wahanol rannau o Gymru i ddatblygu gwersi siart troi ar gyfer pedwar pwnc yn y Cwricwlwm Mathemateg, gyda chymorth caredig Promethean. Bydd modd casglu copi o'r pecyn oddi ar wefan Promethean, sydd â dolen gyswllt iddi ar wefan mathcymru. Hyfed bydd mathcymru yn gosod y gwersi ar gryo-ddisg i'w dosbarthu i ysgolion yng Nghymru. Mae'r pecyn addysgu yn ddefnyddiol iawn fel fframwaith i athrawon allu datblygu eu gwersi personol eu hunain, a gall yr adran gymorth fideo sy'n rhan o'r pecyn helpu athrawon sy'n llai cyfarwydd â'r dechnoleg. Mae'r gwersi yn pontio cyfnodau, ac wedi eu hanelu at CA2/CA3. Fel cam nesaf, mae mathcymru yn gobeithio gallu cymhwyso'r adnoddau ar gyfer byrddau gwyn eraill, megis Smart a Hitachi, er mwyn i holl ysgolion Cymru allu cael budd ohonynt.

Cystadleuaeth "Popeth Amdanom Ni" ar gyfer CA1

Yn ddiweddar, mewn nifer o ysgolion cynradd ym Mro Morgannwg, mae mathcymru wedi bod yn treialu cystadleuaeth fathemateg newydd i Gyfnod Allweddol 1 ac, oherwydd llwyddiant y treialu, byddwn yn awr yn cynnal y gystadleuaeth trwy Gymru gyfan ar raddfa ardal-wrth-ardal. Gweithgaredd dosbarth yw'r gystadleuaeth a bydd ysgolion yn gallu cyflwyno un cais ar ran pob dosbarth CA1 sydd ganddynt. Bydd yr ysgol fuddugol yn derbyn ymweliad oddi wrth gyfathrebwr mathemateg am ddiwrnod. Bydd gwybodaeth bellach am bob cystadleuaeth ardal ar gael i chi cyn hir gan ymgynghorydd rhifedd eich AAL, a bydd y manylion hefyd i'w gweld ar wefan mathcymru.



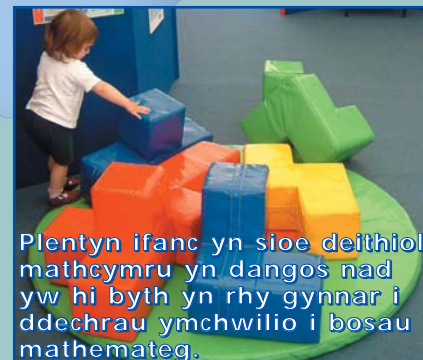
Arddangosfa trin data a gyflwynwyd gan Ysgol Gynradd Holton yn y gystadleuaeth "Popeth Amdanom Ni".

Sioeau Teithiol mathcymru

Eleni bydd mathcymru yn cynyddu amllder ei sioeau teithiol poblogaidd. Mae sioe deithiol nodweddiadol yn cynnwys cyfres o weithgareddau ac eitemau arddangos

Eisteddfod, ond eleni fe feddylion ni y bydden ni'n rhoi cynnig ar dorri cwys newydd hefyd. Yn ddefnyddol, fe hoffon ni i ysgolion uwchradd nid yn unig wirfoddoli

ymarferol, ynghyd â chyflwyniad adloniadol o dan ofal un o aelodau'r tîm. Anelir y cyflwyniadau at Gyfnod Allweddol 3 (sioe am debygolrwydd) neu Gyfnod Allweddol 2 (sioe ddatrys "Pwy Wnaeth?" yn fathemategol), ond mae'r gweithgareddau yn hwyl i bob oedran ac yn cynnwys llawer o gemau, posau a phroffion rhesymu. Mae gan y gweithgareddau gyfarwyddiadau a labeli dwyieithog, a gellir hefyd gyflwyno'r sioe CA3 trwy gyfrwng y Gymraeg.



Plentyn ifanc yn sioe deithiol mathcymru yn dangos nad yw hi byth yn rhy gynnar i ddechrau ymchwilio i bosau mathemateg.

Dywedodd Gareth Smith, Cydlynnydd Cenedlaethol mathcymru "Rydyn ni eleni am geisio mynd â'r agwedd hwyliog ar fathemateg i gymaint o ardaloedd ag y gallwn ni yng Nghymru. Rydyn ni eisoes yn trafod â'r Urdd ynghylch cael treulio amser yn eu gwerysilloedd (Glanllyn a Llangrannog) ac, wrth gwrs, yn yr

i fod yn lleoliad i'r sioe deithiol, sy'n rhad ac am ddim, ac at wasanaeth disgyblion yr ysgol a fydd yn ei chroesawu, ond hefyd ganiatai i blant ysgolion cynradd y cylch ddod draw i fynychu'r sioe. Fel hyn, bydd llawer o blant yr ardal yn cael budd o'r ymweliad, bydd yr ysgolion yn cryfhau eu cyswllt â'u hysgolion cynradd lleol, a bydd mathcymru yn cael y cyfle i gyflwyno eu dwy sioe - trefniant rhagorol!" Gall unrhyw athrawon mathemateg sydd â diddordeb mewn gwahodd sioe mathcymru i'w hysgol gysylltu â ni trwy ein gwefan.

COFIWCH
Wythnos Fathemateg Cymru 2004
11 - 15 Hydref
Gwelwch www.mathcymru.org am fwy o fanylion.



Cefnogrir mathcymru gan Lywodraeth Cynulliad Cymru

Mathemateg ar Wib

Mae pob cais ar gyfer cystadleuaeth mathcymru Maths in Motion am eleni wedi dod i law, ac mae'r enillywyr rhanbarthol wedi eu dewis. Y dyddiad ar gyfer y Rownd Derfynol Fawr yw 12fed Chwefror, a bydd y timau buddugol yn cael eu gwahodd i'r Ganolfan Darganfod Gwyddoniaeth yn Techniquet ym Mae Caerdydd, ar gyfer cystadlu. Bydd trac rasio penodol yn cael eu gosod iddynt, a byddant yn cael dwy awr o amser i ymarfer a thiwno eu ceir. Wedyn byddant yn rasio yn erbyn ei gilydd, a dymunwn yn dda iawn i bob un ohonynt oherwydd bydd gan mathcymru wobrau ardderchog ar gyfer yr enillywyr. Ond, waeth beth fydd y canlyniad, bydd pob cystadleuydd yn sicr o fwynhau diwrnod arbennig, yn derbyn anrhegion gan gwmni Jaguar, a chael golwg ar



Jane Davidson waves the chequered flag for last year's Maths in Motion competition winners.



Am fwy o wybodaeth cysylltwch â: **Gareth Smith**, Cydlynnydd mathcymru, Gweithdy Techniquet, Unit 36 Bessemer Road, Caerdydd. CF11 8BA Cymru DU

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