# **COMPANIES HOUSE**

United Kingdom Mathematics Trust Company Limited by Guarantee Report and financial statements For the year ended 31 July 2017

TUESDAY



A10 30/01/2018 COMPANIES HOUSE

Company No. 03271283 Charity No. 1059125

# Legal and administrative details

Company registration number:

03271283

Registered charity number:

1059125

Registered office:

The Maths Challenges Office School of Mathematics University of Leeds

LEEDS LS2 9JT

**Trustees and directors:** 

Mrs A F Baker
Professor J Brindley
Professor C J Budd
Dr K M Chicot
Dr J D Cranch
Dr D M Crawford
Mrs R M Dorris
Mrs K Fogden
Mr R J Gazet
Mr F R Heywood
Mr G J Keniston-Cooper

Dr C Kilgour Dr G Leversha Mr S J Mulligan Dr V Neale Miss J S Ramsden Professor A Rucklidge

Dr G C Smith

Secretary:

Mrs M T Fyfe

**Director of the Trust:** 

Mrs R Greenhalgh

**Deputy Director of the Trust:** 

Dr S O'Hagan

**Administrative officers:** 

Ms N Bray Mrs E J Clark Ms B Detoeuf Ms H Macklin Mrs S Raffle-Edwards

# Legal and administrative details (continued)

Bankers:

Lloyds Bank plc 4 West Street HAVANT Hampshire PO9 1PE

Lloyds Bank plc 6/7 Park Row LEEDS LS1 1NX

Santander UK plc 2 Triton Square Regent's Place London NW1 3AN

**Auditor:** 

Grant Thornton UK LLP Chartered Accountants Senior Statutory Auditor 2 Broadfield Court SHEFFIELD S8 0XF

Website:

www.ukmt.org.uk

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### Report of the Trustees

The Trustees, who are also directors of the charitable company ('the Trust') for the purposes of the Companies Act, present their report together with financial statements for the year ended 31 July 2017.

#### **Constitution of the Trust**

United Kingdom Mathematics Trust was incorporated on 30 October 1996. It is a company limited by guarantee, registration number 03271283, and is registered with the Charity Commission as Charity Number 1059125. Its registered address is The Maths Challenges Office, School of Mathematics, University of Leeds, Leeds, LS2 9JT. The governing document is the Memorandum and Articles of Association.

The Trustees of the Charitable company ('the Trust') are also the Trustees of the charity for Companies Act purposes. The governing body of the Trust is its Council, and its Trustees are precisely the members of the Council.

Under Article 1.1 of the constitution, the Royal Institution of Great Britain and The Mathematical Association are Participating Bodies, and the Association of Teachers of Mathematics, the Edinburgh Mathematical Society, the Institute of Mathematics and Its Applications, the London Mathematical Society and The Royal Society are Supporting Bodies. The Royal Institution of Great Britain is also the Patron of the Trust.

#### **Main Objectives**

The Trust is established to advance the education of children and young people in mathematics, in particular by organising and running mathematics competitions.

#### Membership

The Trustees during the period covered by this report were:

Mrs A F Baker
Professor J Brindley
Professor C J Budd, Chairman
Dr C M Campbell (resigned 12 April 2017)
Dr K M Chicot
Dr J D Cranch
Dr D Crawford, Treasurer
Mr R Cresswell (resigned 12 August 2016)
Mrs Rachel Dorris (appointed 15 October 2016)
Mrs K Fogden
Mr R J Gazet

Mr Fraser Heywood (appointed 15 October 2016)
Mr Graham Keniston-Cooper (appointed 12 April 2017)
Dr Calum Kilgour (appointed 15 October 2016)
Dr G Leversha
Mr S J Mulligan, Vice-Chairman (from 12 April 2017)
Dr V Neale
Miss J Ramsden (resigned 15 October 2016 and was reappointed 21 October 2017)
Mr W P Richardson, Vice-Chairman (resigned 12 April 2017)
Professor A Rucklidge

Dr G C Smith, Vice-Chairman

The members of the Trust are the present and former Trustees, present members of Subtrusts and others granted membership by the Council. The current members of the Trust are the Trustees, as above, together with Mr D F Archer, Mr R M Atkins, Dr R W Bray, Mr D Bunnell, Dr C M Campbell, Dr D J Collins, Dr D Crann, Mr R Cresswell, Mr A Crews, Mr G de Sainte Croix, Dr A Eames-Jones, Dr C C Fiddes, Mrs M T Fyfe (Secretary), Dr A D Gardiner, Mr H Groves, Mr T J Heard, Miss P Hunt, Mrs M Jackson, Mr C James, Miss S Jameson-Petvin, Dr A K Jobbings, Dr V Kadelburg, Dr V Kathotia, Mrs P King, Professor F C Kirwan, Professor T W Körner, Professor I B Leader, Dr J S Myers, Mr N Lord, Mr A J S Mann, Professor A C McBride, Mr P Murray, Dr P M Neumann, Mr D J Orton, Mr S Power, Mr P Ransom, Mrs M Read, Mrs H Reeve, Mr W P Richardson, Professor J C Robson, Dr A Sanders, Dr S Santos, Professor B Silverman, Dr J R Silvester, Dr A B Slomson, Mr R C Smart, Dr W B Stewart, Mr P A J Thomas, Mr A Voice, Mr J R Welham, Ms M Wimbury and Mr D Yeo. The Royal Institution of Great Ditiain and The Mathematical Association are also members.

The Trustees are saddened to report the passing away of Dr Brian Wilson, member of the Trust, in the year.

# Report of the Trustees (continued)

#### Staff

The staff are joint employees of The Trust and the University of Leeds, under the terms of a Joint Employment Agreement dated 13 May 2003, and renewed in May 2008.

The Director of the Trust is Mrs Rachel Greenhalgh, and the Deputy Director is Dr Steven O'Hagan. The Administrative Officers, who provide the bulk of the administrative support for the work of the Trust through the Maths Challenges Office, are Ms Nicky Bray, Mrs Janet Clark, Ms Beverley Detoeuf, Ms Heather Macklin and Mrs Shona Raffle-Edwards. They are assisted by Miss Jessica Davis and Miss Jo Williams who act as clerical assistants. Mr Gerard Cummings and Miss Sara Liptrot also provided clerical support during the year. Mrs Mary Roberts acts as the supervisor of a team of part-time clerical staff which, during the period covered by this report, consisted of Mrs Aurelia Maciuniene, Miss Jessica Raby-Cox, Mr Stewart Ramsay, Mrs Alison Steggall, and Ms Tabitha Taylor.

#### **Meetings**

Council held its 52<sup>nd</sup> and 53<sup>rd</sup> meetings on 15 October 2016 and 12 April 2017 respectively.

The twentieth Annual General Meeting of the Trust was held at the London Mathematical Society on 12 April 2017.

#### Structure of the Trust

The Trust has Subtrusts (Represented Branches' in the Articles). Each of these subtrusts is in charge of one of the spheres of UKMT activity; each has its own membership subordinate to that of the main Trust. The Trust currently has four Subtrusts as follows:

- 1. The Challenges Subtrust, whose main responsibilities are overseeing the running of:
  - a) the mass entry Junior, Intermediate and Senior Mathematical Challenges for school pupils aged between 11 and 18 approximately;
  - b) the more advanced, more specialised competitions (Junior Mathematical Olympiad, Junior Kangaroo, Intermediate Mathematical Olympiad and Kangaroo, and Senior Kangaroo) for school pupils aged between 11 and 18 approximately.
- 2. The British Mathematical Olympiad Subtrust (BMOS), which oversees the Olympiad activities for school pupils aged 16 or over, the Mathematical Olympiad for Girls for school pupils approximately aged 15 or over, and selective mentoring, training and camps for school pupils aged 12 or over.
- 3. The Team Maths Challenges Subtrust (TMCS), which oversees the mass entry Team Mathematics Challenge for school pupils aged between 12 and 14 approximately, the Senior Team Mathematics Challenge (in collaboration with the Further Mathematics Support Programme) for pupils aged 16, 17 or 18, and also produces the Primary Team Maths Resources.
- 4. The Enrichment Subrust, with responsibility for organising and running the Trust's outreach and enrichment activities, including the National Mathematics Summer Schools and Mathematical Circles.

Council has established the following standing committees to expedite its business and to widen channels of communication: Finance and General Purposes Committee, Investment Committee, Nominations Committee, Publications Committee, and Technology Group.

## Report of the Trustees (continued)

#### Activities of the Trust performed for the public benefit

The Trustees confirm that they have had reference to the information contained within the Charity Commission's general guidance on public benefit when reviewing the Trust's aims and objectives and in planning future activities for the next financial year.

The Trust is established to advance the education of children and young people in mathematics, and in particular by organising and running mathematics competitions. It does this mainly by running the Junior, Intermediate and Senior Mathematical Challenges, and two Team Challenges.

These activities are augmented by follow-up competitions including, especially, our participation in the international Association Kangourou sans Frontières contests and the International Mathematical Olympiad; publications for teachers and pupils, mentoring schemes, summer schools, Mathematical Circles, and by providing resources for teachers.

The Junior, Intermediate and Senior Mathematical Challenges and the Team Maths Challenges are open to all secondary schools in the United Kingdom. In 2016-17 the number of entries for these events were as follows:

	2016-17		2015-16	
	Schools	Pupils	Schools	Pupils
Senior Mathematical Challenge	2,253	112,350	2,223	110,500
Intermediate Mathematical Challenge	3,322	267,350	3,241	262,100
Junior Mathematical Challenge	4,064	307,430	4,003	303,120
Team Maths Challenge	1,757	N/A	1,770	N/A
Senior Team Maths Challenge	1,298	N/A	1,200	N/A

It is gratifying to note that the number of participating schools and pupils has increased for each Mathematical Challenge, and indeed total challenge entries reached their highest ever figure in 2016-17.

Work continued to identify schools that seemed to enter a relatively small proportion of their pupils for the Challenges, and under-represented areas of the UK, and entries were encouraged through sending out books, and extension exercises and solutions. We are grateful to the Institute and Faculty of Actuaries for their support of the Mathematical Challenges.

Our mentoring schemes continue to be well received, and we are grateful to Oxford Asset Management for their support of the schemes. The schemes provide at four levels, via email, a series of challenging mathematical problems, requiring full written solutions, to stretch and inspire the highest attaining and willing secondary school pupils. Each participant is linked up with a mentor who can offer help, guidance and encouragement. Participants are mentored either by external undergraduates, postgraduates and teachers who are familiar with problem-solving techniques, or by their own teachers within their school. The mentor is able to discuss the problems and other mathematical ideas, and read and return their solutions with helpful comments. In 2016-17, the Junior scheme involved 867 schools, the Intermediate scheme 832 schools, and the Senior scheme 427 schools. Over 200 students were provided with an external mentor for the Intermediate and Senior schemes. A small number of students were also invited to participate in the Advanced scheme. These schemes are available to schools without charge.

## Report of the Trustees (continued)

The final of the Team Maths Challenge was held again at the Royal Horticultural Society Hall in June 2017 with 88 teams taking part, and was won by St Olave's Grammar School, Kent. The final of the Senior Team Maths Challenge, which we run in partnership with the Further Mathematics Support Programme, was held in February 2017 at the Royal Horticultural Society Hall, and was won by Ruthin School.

We continued to provide Primary Team Maths Resources. These are intended to be used by secondary schools to run events for their feeder primary schools, but we encourage them to be used in other ways. They are made available to schools electronically without charge.

We continued with our programme of Mathematical Circles, running nine events during the year. Schools are invited to send around two students (approximately aged 15) of their choice to these events at no charge.

Our programme of summer schools included running two National Mathematics Summer Schools at Woodhouse Grove School, West Yorkshire, in July 2017, and one at St Anne's College and the Mathematical Institute, Oxford in August 2016. We also ran a Summer School for Girls in August 2016 at St Anne's College and the Mathematical Institute, Oxford, thanks to support from an anonymous donor.

The Trustees are keen to promote and encourage girls' participation in mathematics. The Mathematical Olympiad for Girls, which is available free of charge for the first four entrants per school, saw a further increase in participation, with over 2,200 entries.

Over 4,500 schools took part in our competitions in 2016-17. We estimate that over 80% of secondary schools in the UK participated in at least one of them. The total number of entries for these Challenges has more than doubled during the past 20 years. The level of support and the many appreciative comments received indicate that the Challenges are serving their purpose of showing students the satisfaction of solving hard problems and raising the profile of Mathematics in schools. Our challenge materials and other publications, provide teachers with high quality enrichment materials.

Schools pay an entry fee of £1.30 per pupil for each of the individual Challenges and £35 per team for the Team Challenges. Entries for pupils who qualify for the follow-up competitions are free.

Students aged 14 -16 who are among the top 1.5% of scorers in the Intermediate Mathematical Challenge are selected by lottery and invited to attend one of the Summer Schools. The charge for the Summer Schools for each pupil is £200 for the week. This covers about one-third of the total cost, the rest being met by sponsorship and the Trust's other resources. The fee is remitted in case of hardship and the Trustees believe that, as a result, no-one is excluded because of poverty.

The Trust selects and trains teams to represent the UK in international mathematics competitions. The teams selected to represent the UK at international competitions performed well this year. In particular, the UK team at the 2017 International Mathematical Olympiad in Brazil came equal 9th out of 111 participating nations, and were awarded three gold medals, two bronze medals, and an Honourable Mention.

A trial of a new competition, the Junior Algorithmics Challenge, took place during the year. Trustees will consider the future of this at its strategic away day early next year. A small pilot of a mathematical film competition, Maths Miniatures, also took place, working in partnership with IMO2019 Ltd, MathsWorldUK, and University of Leeds, and we plan to run this again next year.

Full details of all the Trust's activities are given in our Yearbook 2016-17. This includes all the questions used in our competitions with solutions in most cases. A copy is sent free to all participating schools and, we believe, provides a valuable resource for them. All schools receive a termly Newsletter and posters from the Trust.

As ever, we are greatly indebted to the work of our staff and volunteers. Whilst we do not wish to name individuals, particular thanks are given to the work done by those who contribute to the problems setting process. We have over 400 active volunteers without whom it would not be possible to run our activities.

## Report of the Trustees (continued)

#### Treasurer's report

It is pleasing to report that the Trust remains in a secure financial position.

In the last financial year, the trust generated net income of £147,489, a significant increase on last year's figure of £94,720. However, these figures must be viewed carefully since the increase is solely down to the increase in the value of our investments which rose by £136,414 in the previous 12 months. There was a surplus of non-investment income over expenditure of £11,075 but this is around £23k lower than the equivalent figure of £34,168 from last year.

Both income and expenditure have increased over the course of the year. Income increased by £87,905 while total expenditure increased by £80,998.

On the income side, it is pleasing to note that even in these times of financial challenge for schools, income from entry fees for the Challenges and Team Competitions rose by over £24k. Entries to the Challenges increased during 2016/17, and changes to the procedure for the Senior Team Maths Challenge, where the Trust has taken over the entry administration from the FMSP, has led to an increase in income. The other main source of increased income came from publications which increased its income by over £31k. There was no income from Teacher Meetings this year, as the Trust has taken time out from running these and instead is reviewing how best to support teachers in the future.

On the expenditure side, the major contributor to the increase was a rise in staff salaries of over £50k with the first complete year's salary of the Deputy Director forming a significant part of that. The cost of venue hire also rose by £23k, which is largely explained by the change in operating procedure for the Senior Team Challenge where the Trust has taken over the administration from the FMSP. Other significant increases came in the cost of typesetting (£7k) and royalty payments (£7.5k) but these are to be expected when publication sales increase. It should also be noted that expenditure on postage and stationery both dropped, by £4k and £5k respectively, helped in no small part by the reduction of the direct mailings sent to schools and their replacement by e-mail circulars instead.

As was mentioned above, the value of our investments rose significantly again from £1,025,919 to £1,162,333, an increase of £136,414. The value of these investments is now approaching double the historical cost of the purchases. No new investment purchases were made over the course of the year. It is likely that much of these investments will be cashed in during the next two financial years to support the running of IMO2019, so it is unlikely that we will see such healthy increases in the future.

The Treasurer is extremely grateful for all the help and support provided by the Director and staff at the UKMT Office. The assistance of all the Subtrusts in effectively managing their budgets is also gratefully acknowledged.

The Trust is enormously grateful for the valuable support of all its sponsors, donors and supporters, details of whom can be found in the Yearbook.

#### **Future plans of the Charity**

The Trustees are planning a strategic away day in early 2018.

The Trust intends to continue to develop the activities described in this report. In particular it intends to continue its efforts to attract entries to the Mathematical Challenges from new schools and additional entries from existing schools. It is also reviewing its mentoring schemes with the longer term aim to widen participation.

## Report of the Trustees (continued)

Trustees are also considering technological developments which may make operations or activities more efficient. The first release of a new website is due later in 2018, and will include online payment, restricted membership areas, secure electronic access to results, and increased automation of standard processes.

In July 2014, the IMO Advisory Board approved the UKMT's bid to run the International Mathematical Olympiad in the United Kingdom in 2019. A separate company, IMO2019 Ltd, has been formed to organise and run this event.

#### **Reserves policy**

The Trustees have agreed that the Trust should aim to build up its General Reserve to the level of its annual expenditure. They have also agreed to build up an International Reserve ('designated reserve'), particularly to help meet the costs of the IMO in the United Kingdom in 2019. In the approach to IMO 2019, the Trustees agreed to allocate £200,000 to this reserve each year. This policy is reviewed annually.

#### **Investments policy**

The policy of the Trust was reviewed in 2016-17. This policy is reviewed every three years.

#### Risks

The Trustees have reviewed the risks to which the Trust might be exposed, and have updated the Risk Management Policy accordingly. Other than risks which are covered by insurance, the most serious risk is that, through circumstances beyond the control of the Trust, it proved impossible to run one of the Challenges, and that consequently there would be a loss of income from fees. The maximum risk so entailed is considered to be covered by the reserves policy.

#### Statement of Trustees' responsibilities

The trustees (who are also directors of United Kingdom Mathematics Trust for the purposes of company law) are responsible for preparing the Report of the Trustees and the financial statements in accordance with applicable law and regulations.

Company law requires the trustees to prepare financial statements for each financial year. Under that law the trustees have elected to prepare the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'. Under company law the trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP (FRS 102);
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

## Report of the Trustees (continued)

The trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The trustees confirm that:

- so far as each trustee is aware there is no relevant audit information of which the charitable company's auditor is unaware; and
- the trustees have taken all the steps that they ought to have taken as trustees in order to make themselves aware of any relevant audit information and to establish that the charitable company's auditor is aware of that information.

The trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

#### **Small company exemption**

In preparing this report, the Trustees have taken advantage of the small companies exemptions provided by section 415A of the Companies Act 2006.

#### **Auditor**

Grant Thornton UK LLP offer themselves for reappointment as auditor in accordance with the Companies Act 2006.

BY ORDER OF THE COUNCIL

Mrs M T Fyfe Secretary

27 January 2018

# Independent auditor's report to the members of United Kingdom Mathematics Trust

We have audited the financial statements of United Kingdom Mathematics Trust (the 'Trust') for the year ended 31 July 2017 which comprise the Statement of Financial Activities (incorporating income and expenditure account), the Balance Sheet, the Statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards including Financial Reporting Standard 102; The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the Trust's affairs as at 31 July 2017 and of its incoming resources and application of resources including, its income and expenditure for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

#### **Basis for opinion**

We have been appointed as auditor under the Companies Act 2006 and report in accordance with regulations made under that Act. We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Trust in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Who we are reporting to

This report is made solely to the Trust's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Trust's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Trust and the Trust's members as a body, for our audit work, for this report, or for the opinions we have formed.

#### Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Trustees' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Trust's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

# Independent auditor's report to the members of United Kingdom Mathematics Trust (continued)

#### Other information

The Trustees are responsible for the other information. The other information comprises the information included in the Report of the Trustees, set out on pages 4 to 10, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

#### Opinion on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Report of the Trustees for the financial year for which the financial statements are prepared is consistent with the financial statements.
- the Report of the Trustees has been prepared in accordance with applicable legal requirements.

#### Matter on which we are required to report under the Companies Act 2006

In the light of the knowledge and understanding of the Trust and its environment obtained in the course of the audit, we have not identified material misstatements in the Report of the Trustees.

#### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of trustees' remuneration specified by law are not made; or
- · we have not received all the information and explanations we require for our audit.

#### Responsibilities of trustees for the financial statements

As explained more fully in the Statement of Trustees' Responsibilities set out on pages 9 and 10, the Trustees (who are also the directors of the Trust for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Trustees are responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Trustees either intend to liquidate the Trust or to cease operations, or have no realistic alternative but to do so.

# Independent auditor's report to the members of United Kingdom Mathematics Trust (continued)

#### Auditor's responsibilities for the audit of the financial statements

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Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Peter Edwards

Senior Statutory Auditor for and on behalf of Grant Thornton UK LLP Statutory Auditor, Chartered Accountants SHEFFIELD

27 January 2018

# Statement of financial activities (incorporating income and expenditure account)

	Note	Unrestricted funds £	Restricted funds £	Total 2017 £	Total 2016 (note 23) £
Income					
Donations and legacies: Grants, donations and sponsorship	6	51,699	-	51,699	51,185
Income from investments	6	3,047	-	3,047	4,340
Income from charitable activities:  Examination entry fees and related income Summer school fees Sale of publications Other income		1,051,336 33,600 110,272 1,175	- - - -	1,051,336 33,600 110,272 1,175	1,027,022 31,300 79,156 221
Total income		1,251,129		1,251,129	1,193,224
Expenditure					
Expenditure on raising funds Costs of generating voluntary income Expenditure on charitable activities	7 8, 9	5,250 1,220,804	14,000	5,250 1,234,804	4,956 1,154,100
Total expenditure		1,226,054	14,000	1,240,054	1,159,056
Net income before transfers		25,075	(14,000)	11,075	34,168
Transfers between funds		-	-	-	-
Unrealised gains on investments	13	136,414		136,414	60,552
Net income and net movement in fun	ıds	161,489	(14,000)	147,489	94,720
Funds balances brought forward at 1 August 2016	16	1,710,503	28,000	1,738,503	1,643,783
Funds balances carried forward at 31 July 2017	16	1,871,992	14,000	1,885,992	1,738,503

All amounts relate to continuing activities. All recognised gains and losses are included in the Statement of financial activities. There were no movements in funds other than the net income for the year.

United Kingdom Mathematics Trust Company Limited by Guarantee Registered number: 03271283 Financial statements for the year ended 31 July 2017

### **Balance** sheet

	Note	2017 £	2016 £
Fixed assets Tangible assets	11	10,287	16,459
Current assets Debtors Investments Cash at bank and in hand	12 13	91,765 1,162,333 723,683	50,730 1,025,919 705,789
Cash at Dalik and in hand		1,977,781	1,782,438
Creditors: amounts falling due within one year	14	(102,076)	(60,394)
Net current assets		1,875,705	1,722,044
Total assets less current liabilities		1,885,992	1,738,503
Funds			
Restricted funds Unrestricted funds	16 17	14,000 1,871,992 1,885,992	28,000 1,710,503 1,738,503

These financial statements have been prepared in accordance with the special provisions for small companies under section 419(2) of the Companies Act 2006 and with the Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland (FRS 102).

The financial statements were approved by the Trustees on 27 January 2018.

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Dr D M Crawford

Trustee

The accompanying accounting policies and notes form an integral part of these financial statements.

United Kingdom Mathematics Trust Company Limited by Guarantee Registered number: 03271283 Financial statements for the year ended 31 July 2017

# Statement of cash flows

	2017 £	. 2016 £
Cash flows from operating activities	~	. ~ .
Net income (as per the Statement of financial activities)	147,489	94,720
Adjustments for:		
Depreciation of tangible fixed assets	6,172	2,057
Interest receivable	(3,047)	(4,340)
Interest receivable shown in other income	(179)	(77)
(Decrease)/increase in debtors (excluding accrued income)	(42,071)	41,353
Increase/(decrease) in creditors	41,682	(33,983)
Unrealised gain on investments	(136,414)	(60,552)
Net cash generated from operating activities	13,632	39,178
Cash flows from investing activities		
Purchase of tangible fixed assets	-	(18,516)
Interest received	4,262	2,889
Net cash provided/(used in) by investing activities	4,262	(15,627)
Net increase in cash and cash equivalents	17,894	23,551
Cash and cash equivalents at beginning of year	705,789	682,238
Cash and cash equivalents at end of year	723,683	705,789

## Notes to the financial statements (continued)

#### 1 Company information

United Kingdom Mathematics Trust is a company limited by guarantee. The registered office is The Maths Challenges Office, School of Mathematics, University of Leeds, LEEDS, LS2 9JT.

#### 2 Basis of preparation

The financial statements have been prepared in accordance with applicable United Kingdom accounting standards including Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective January 2015) – (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006. The financial statements have been prepared on the historical cost basis except for the modification to a fair value basis for certain financial instruments as specified in the accounting policies below.

The financial statements are presented in Sterling (£).

#### 3 Going concern

After making enquires, the Trustees consider that adequate resources continue to be available to fund the activities of the Trust for the foreseeable future. Accordingly, the Trust continues to adopt the going concern basis in preparing its financial statements.

#### 4 Significant judgements and estimates

Preparation of the financial statements requires management to make significant judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. The items in the financial statements where these judgements, estimates and assumptions have been made include:

#### Grants

The recognition of grants in these financial statements involves judgements as to whether performance or other relevant entitlement conditions have been met.

#### 5 Principal accounting policies

#### Income

#### **Donations and legacies**

#### Grants, donations and sponsorship income

Grants, donations and sponsorship are credited as income when they are receivable provided conditions for receipt have been complied with, unless they relate to a specific future period, in which case they are deferred.

# Notes to the financial statements (continued)

#### Income from charitable activities

#### Examination entry fees

This income arises from the entry fees paid by schools for students participating in the challenges run by the Trust. The income and related debtor for examination fees are accounted for in the period in which the challenge is undertaken.

#### Sales of publications

This income arises from the sale of publications, past papers and other materials (including the Year Book) in connection with the challenges run by the Trust. Income from sales of publications is accounted for when the charity becomes legally entitled to the income.

#### Summer School fees

This income arises from the fees paid by schools or parents/guardians/carers for students invited to and participating in the UKMT Summer Schools. The fee is waived in cases of hardship. The fees are accounted for in the period in which the Summer School takes place.

#### **Expenditure**

Expenditure, which is charged on an accruals basis, is allocated between:

- expenditure incurred in generating funds
- expenditure incurred in fulfilment of the Trust's objectives (charitable activities); and
- expenditure incurred in the direct governance of the Trust (governance costs).

Where appropriate, the expenses of the Trust are charged directly to the activity to which they relate. Salary costs have been allocated to activity cost categories on a basis consistent with the use of the resources.

#### Tangible fixed assets and depreciation

Tangible fixed assets over £1,000 are capitalised at cost and are stated at cost net of depreciation.

Fixtures, fittings and equipment are depreciated over a period of 3 years on a straight line basis.

All fixed asset purchases are used for direct charitable purposes.

#### **Debtors**

Trade and other debtors are recognised at transaction price, less any impairment. Other financial assets are measured initially at fair value, net of transactions costs, and are measured subsequently at amortised cost using the effective interest method, less any impairment.

#### **Current asset investments**

Investments, comprising holdings in the COIF Charities Investment Fund, the CAF UK Equitrack Fund, Hargreaves Lansdown Multi-Manager Balanced Managed Fund and Schroder Charity Multi-Asset Fund are included at market value. Realised and unrealised gains and losses are released to the Statement of financial activities as they arise.

## Notes to the financial statements (continued)

#### 5 Principal accounting policies (continued)

#### Cash at bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments that are readily convertible to known amounts of cash with insignificant risk of change in value.

#### **Creditors**

Short term creditors are recognised at the transaction price. Other financial liabilities are measured at fair value, net of transaction costs, and are subsequently measured at amortised cost using the effective interest method.

#### **Fund accounting**

Restricted funds are to be used for specified purposes laid down by the donor. Expenditure for those purposes is charged against those restricted funds, together with a fair allocation of overheads and support costs.

Unrestricted funds are donations and other incoming resources received or generated for expenditure on the general objectives of the Trust.

Designated funds (note 16) are unrestricted funds which have been designated for specific purposes by the Trustees.

#### **Pension**

For those employees who have a defined contribution pension scheme in place, the Trust makes a contribution currently equivalent to 14% of gross salary for academic staff and 17.5% for clerical staff into those schemes. The charity's contribution is charged to the Statement of financial activities in the financial year.

#### Financial Instruments

The charity only enters into basic financial instruments transactions that result in the recognition of financial assets and liabilities like trade and other accounts receivable and payable, and listed investments.

Debt instruments (other than those wholly repayable or receivable within one year), including other accounts receivable and payable, are initially measured at present value of the future cash flows and subsequently at amortised cost using the effective interest method. Debt instruments that are payable or receivable within one year, typically trade payables or receivables, are measured, initially and subsequently, at the undiscounted amount of the cash or other consideration, expected to be paid or received. However, if the arrangements of a short-term instrument constitute a financing transaction, like the payment of a trade debt deferred beyond normal business terms or financed at a rate of interest that is not a market rate or in case of an out-right short-term loan not at market rate, the financial asset or liability is measured, initially, at the present value of the future cash flow discounted at a market rate of interest for a similar debt instrument and subsequently at amortised cost.

Financial assets that are measured at cost and amortised cost are assessed at the end of each reporting period for objective evidence of impairment. If objective evidence of impairment is found, an impairment loss is recognised in the Statement of financial position.

# Notes to the financial statements (continued)

For financial assets measured at amortised cost, the impairment loss is measured as the difference between an asset's carrying amount and the present value of estimated cash flows discounts at the asset's original effective interest rate. If a financial asset has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract.

For financial assets measured at cost less impairment, the impairment loss is measured as the difference between an asset's carrying amount and best estimate of the recoverable amount, which is an approximation of the amount that the Company would receive for the asset if it were to be sold at the reporting date.

Financial assets and liabilities are offset and the net amount reported in the Statement of financial position when there is an enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

#### 6 Income

#### Grants, donations and sponsorship

	2017	2016
	£	£
Grants	2,000	-
Donations	15,699	9,185
Sponsorship	34,000	42,000
	51,699	51,185
Income from investments		
	2017	2016
	£	£
Bank deposit interest receivable	3,047	4,340
Expenditure on raising funds – cost of generating voluntary income		
	2017	2016
	£	£
Executive director's salary (part)	4,759	4,564
Social security costs	491	392

5,250

4,956

#### 8 Expenditure on charitable activities

	CST	BMOS	TMC	STMC	Central	Publications	Enrichment	2017 Total	2016 Total
	£	£	£	£	£	£	£	£	£
Donations	-	<u>.</u>	-	-	-	-	_	-	3,524
Insurance	-	899	-	-	3,439	50	-	4,388	2,406
Prizes	10,257	3,609	17,870	2,568	1,336	-	1,498	37,138	40,681
Speakers	-	-	-	-	-	-	742	742	4,122
Teacher cover	=	-	330	-	-	-	210	540	1,566
Printing	91,338	724	9,432	1,984	3,006	40,963	190	147,637	141,758
Stationery	6,847	145	2,431	1,229	2,711	277	905	14,545	19,095
Postage	13,654	1,397	4,117	1,411	82,957	8,209	584	112,329	116,690
Telephone	-		-	-	1,222	_	-	1,222	1,208
Travel and	13,930	42,732	22,733	13,556	8,043		14,190	115,184	117,378
accommodation	13,930	42,732	22,733	15,550	0,043	-	14,190	115,164	117,576
Venue hire and	29,515	65,720	39,384	36,832	5,535		71,054	248,040	224,989
catering	29,313	05,720	39,304	30,032	3,333	-	71,054	240,040	224,909
Trustees'	2,852	5,661	1,902	579	1,078		508	12,580	8,349
expenses	2,002	5,001	1,902	317	1,070	-	300	12,500	0,549
Bank charges	-	-	-	-	132	-	-	132	382
Staff salaries,		_		_	407,904			407,904	357,709
pension and NI	_	_	_	_	407,704	-	_	407,704	337,707
Training (staff)					1,887			1,887	1,374
and recruitment	-	_	_	_	1,007	-	-	1,007	1,5/4
Website	-	-	-	-	1,768	-	-	1,768	1,273
Rent	-	-	-	-	29,342	-	-	29,342	29,754
Typesetting	6,772	14	1,678	1,200	17,045	9,554	277	36,540	29,721
Subscriptions	-	-	-	-	3,537	-	-	3,537	1,050
Royalties	-	-	-	- ,	-	19,324	· · ·	19,324	11,881
Other direct	12.002				1717			16 750	20,651
expenditure	12,003	-	-	-	4,747	-	-	16,750	20,031
Governance					23,275			23,275	18,539
costs			<del></del>	<u>-</u>					10,559
=	187,168	120,901	99,877	59,359	598,964	78,377	90,158	1,234,804	1,154,100

CST = Challenges Subtrust

BMOS = British Mathematical Olympiad Subtrust

TMC = Team Maths Challenge

 ${\tt STMC} = {\tt Senior} \; {\tt Team} \; {\tt Maths} \; {\tt Challenge}$ 

# Notes to the financial statements (continued)

### 8 Expenditure on charitable activities (continued)

Direct charitable expenditure has been spent on the following projects:

	Unrestricted Funds £	Restricted Funds £	2017 Total £	2016 Total £
Challenges Subtrust BMOS TMC STMC Central Publications Enrichment	187,168 120,901 99,877 59,359 598,964 78,377 76,158	- - - - - 14,000	187,168 120,901 99,877 59,359 598,964 78,377 90,158	177,487 125,024 89,305 45,946 580,994 44,264 91,080
	1,220,804	14,000	1,234,804	1,154,100

Expenditure is charged directly to the project to which it relates and, where relevant, is restricted in line with the donor's restriction of expenditure eligible under funding received.

### 9 Expenditure on charitable activities - governance costs

	2017 £	2016 £
Auditor's remuneration – audit services Auditor's remuneration – non-audit services Legal and professional Other costs	10,846 5,515 35 6,879	6,750 1,500 35 10,254
	23,275	18,539

#### 10 Staff costs

	2017 £	2016 £
Salaries	336,905	297,907
Social security costs	24,809	19,029
Pension contributions	51,440	45,729
	413,154	362,665

Since September 2005 the United Kingdom Mathematics Trust has only employed staff jointly with the University of Leeds. On 19 April 2016, the Trust employed a full time Deputy Executive Director, Dr S O'Hagan. During the year, the part-time Executive Director and Deputy Executive Director, together with six full-time and eight part-time staff have been so employed. In addition, temporary clerical staff provided services to the Maths Challenges Office during busy periods.

The Trustees consider that the only key management personnel of the Trust, as defined by Charities SORP (FRS 102), are the Executive Director and Deputy Executive Director.

The average number of employees during the year was 12 (2016: 11) including joint employees.

	2017	2016
	£	£
Key management personnel (including pension contributions)	114,886	72,410
Employees earning £60,000 or more per annum were as follows:		
	2017	2016
	£	£
£60,000 - £70,000	1	-

#### 11 Tangible fixed assets

		Fixtures, fittings and equipment
Cost		
At 1 August 2016		100,951
Additions		
Disposals		
At 31 July 2017	·	100,951
Depreciation		
At 1 August 2016		84,492
Provided in the year		6,172
Depreciation on disposals		
At 31 July 2017		90,664
Net book value		
At 31 July 2017		10,287
At 31 July 2016		16,459
12 Debtors		
	2017	2016
	£	£
Trade debtors	11,337	17,879
Accrued income	996	2,032
Prepayments	33,912	30,819
Other debtors	5,520	-
Amounts owed by related parties	40,000	
	91,765	50,730

#### 13 Current asset investments

	2017 £	2016 £
Market value at beginning of the year	1,025,919	965,367
Additions		-
Disposals	-	-
Net investment gains	136,414	60,552
Market value at end of the year	1,162,333	1,025,919
Investments are held in units of common investment funds.  The investments are classified as follows: COIF Charities Investment Fund CAF UK Equitrack Fund Schroders Charity Multi Asset Fund Hargreaves Lansdown Multi Manager Balanced Managed Trust	410,060 427,749 188,278 136,246	364,809 372,123 169,870 119,117
	1,162,333	1,025,919
Historical cost at end of the year	660,000	660,000

The difference between historical cost of investments and their market value is included in unrestricted funds.

#### 14 Creditors: amounts falling due within one year

	2017	2016
	£	£
Bank account – unpresented cheques	811	444
Accruals	29,528	27,536
Deferred income	59,314	17,877
Other creditors	12,423	14,537
·	102,076	60,394

UKMT hold £22,000 (2016: £27,000) for EGMO (European Girls Maths Olympiad) in other creditors and cash that relates to work carried outside UKMT for EGMO.

#### 15 Financial instruments

#### Financial assets measured at fair value through profit or loss

	2017 £	2016 £
Listed investments	1,162,333	1,025,919
Financial assets measured at amortised cost		
	2017 £	2016 £
Trade debtors Other debtors	11,337 45,520 56,857	17,879  17,879
Financial liabilities measured at amortised cost		
	2017 £	2016 £
Accruals Deferred income Other creditors	29,528 59,314 12,423 101,265	27,536 17,877 14,537 59,950

#### 16 Statement of funds

•	Balance at 1 August 2016 £	Income £	Expenditure £	Gains on investments £	Transfer between funds	Balance at 31 July 2017 £
Restricted funds Unrestricted funds	28,000	-	(14,000)	-	-	14,000
Designated International Reserve General unrestricted	715,350	-	-	-	200,000	915,350
- General Reserve	995,153	1,251,129	(1,226,054)	136,414	(200,000)	956,642
	1,738,503	1,251,129	(1,240,054)	136,414		1,885,992

The International Reserve has been established by the Trustees to meet the costs of a projected IMO in the United Kingdom in 2019 and other international events.

The Restricted funds relate to grants provided by the Department for Education and a donation received to be allocated to Summer Schools for Girls.

General unrestricted funds are those funds expendable at the discretion of the Trustees in pursuance of the Trust's objects.

#### 17 Analysis of net assets between funds

Fund balances at 31 July 2017 are represented by:

	Unrest	Unrestricted			
	Designated General		funds	Total	
	£	£	£	£	
Tangible fixed assets	-	10,287	-	10,287	
Current assets	915,350	1,048,431	14,000	1,977,781	
Current liabilities		(102,076)		(102,076)	
	915,350	956,642	14,000	1,885,992	

#### 18 Taxation

The Trust is a registered charity and therefore entitled to exemptions from United Kingdom corporation tax in accordance with Part 11 Corporation Tax Act 2010.

## Notes to the financial statements (continued)

#### 19 Trustees' expenses

Two Trustees (2016: two) received remuneration in the period from the Trust. See note 22 for further details. During the year, 18 Trustees (2016: 18) were reimbursed from charity funds for expenses incurred by them for work performed on behalf of the Trust. The total amount reimbursed to the Trustees was £16,132 (2016: £15,002), and related to travel and subsistence, printing, postage, telephone expenses and marking costs.

#### 20 Rights of Members

The Trust is a company limited by guarantee. Each member undertakes to contribute such amounts as may be required (not exceeding  $\pounds 1$ ) to the assets of the Trust if it is wound up while he/she is a member, or within one year after he/she ceases to be a member, for the payment of its debts and liabilities.

The income and property of the Trust must be used solely towards the promotion of its objects and no amount can be paid to any member by way of dividend or other share of profit. In the event of the Trust being wound up with a surplus, that surplus must be transferred to another charitable body with similar objects.

Because of the restrictions on the distribution of surpluses, there are no equity interests in the Trust's reserves.

#### 21 Capital commitments and contingent liabilities

The Trust did not have any capital commitments or contingent liabilities at 31 July 2017 or 31 July 2016.

#### 22 Related party transactions

Mr W P Richardson received £4,950 (2016: £3,933) for typesetting. Dr G C Smith received royalties of £3,016 (2016: £1,405) in the year. No other Trustees received any remuneration from the Trust.

Due to the nature of the Trust's operations and the composition of the Trust's members, it is inevitable that transactions will take place with organisations in which a member may have an interest. All transactions involving such organisations are conducted at arm's length and in accordance with the Trust's procurement policy.

During the year United Kingdom Mathematics Trust loaned £40,000 to IMO 2019 Ltd, a company in which Dr G C Smith and Mr Graham Keniston-Cooper are also directors. No interest is repayable on this loan.

#### 23 Statement of financial activities comparative note

	Unrestricted funds	Restricted funds £	Total 2016 £
Income	~	~	~
Donations and legacies:			
Grants, donations and sponsorship	51,185	-	51,185
Income from investments	4,340	-	4,340
Income from charitable activities:			
Examination entry fees and related income	1,027,022	-	1,027,022
Summer school fees Sale of publications	31,300 79,156	-	31,300 79,156
Other income	221		221
Total income	1,193,224		1,193,224
Expenditure			
Expenditure on raising funds			
Costs of generating voluntary income	4,956	-	4,956
Expenditure on charitable activities	1,140,100	14,000	1,154,100
Total expenditure	1,145,056	14,000	1,159,056
Net income before transfers	48,168	(14,000)	34,168
Transfers between funds	-	-	-
Unrealised gains on investments	60,552	-	60,552
Net income and movement in funds	108,720	(14,000)	94,720
Funds balances brought forward at 1 August 2015	1,601,783	42,000	1,643,783
Funds balances carried forward at 31 July 2016	1,710,503	28,000	1,738,503