



NN National Numeracy
for everyone, for life



Ipsos MORI

THE
POLICY
INSTITUTE



Numerate nation? What the UK thinks about numbers

#NationalNumeracyDay

Introduction

National Numeracy exists to enable everyone across the UK to be confident and competent to use numbers and data to make good decisions in their daily lives. The challenge is substantial; the data gathered for this report is remarkably consistent with other sources, which all suggest that around half of working age adults have the everyday maths skills that we expect of primary school children and only around a quarter are at or above the level that we expect of a 16-year-old.

We are working to better understand the impact of this collective innumeracy – the headline is an annual cost of £20.2 billion – but we are yet to see any evidence that it will be possible to generate a significant improvement in UK productivity or household financial capability without addressing the issue. We see a basic level of numeracy as a necessary (but not sufficient) condition for productivity improvement and for individual financial

capability – but, with the exception of our work in the NHS, we are yet to see organisations addressing this in a systemic way; poor numeracy remains an ‘elephant in the room’.

National Numeracy Day is about raising awareness of the numeracy issue – and encouraging everyone in the UK to take one simple step towards better confidence with numbers by taking the National Numeracy Challenge. It only takes a few minutes to get started, and from there, there are tailored, easy to use tools that can enable you to sharpen up the areas you need most help with. Being better with numbers isn’t a special talent, it’s something we can all learn at any stage in our lives.

Mike Ellicock

CEO of National Numeracy

About this study

To mark National Numeracy Day 2019, Ipsos MORI, in partnership with the Policy Institute at King's College London and National Numeracy, carried out a major survey of over 2,000 adults aged 16 to 75 in the UK to assess levels of numeracy among the public and explore attitudes towards maths and numbers.

The survey highlights how far the UK has to go before it can call itself a truly numerate nation, stemming in part from the comparatively low value people place on being good with numbers and the public's relative lack of confidence in their own maths ability.

Technical details

- Ipsos MORI interviewed 2,007 adults aged 16 to 75.
- All interviews were conducted online.
- Fieldwork was conducted between 5 and 9 April 2019.
- Data are weighted to reflect the national population profile.

How numerate is the UK?

More than half the working-age population has the numeracy level expected of a primary school child

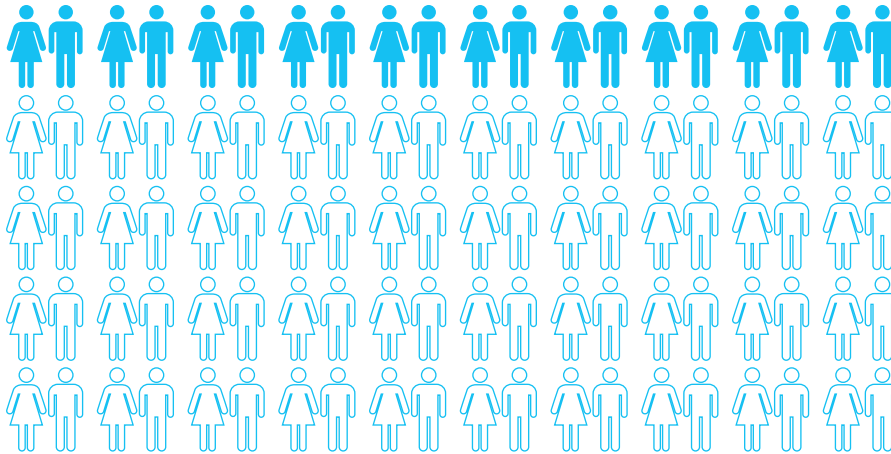
Based on the results from a five-question multiple-choice test of people's everyday maths skills, **56%** of the population scored less than 3. The questions are everyday maths questions from the National Numeracy Challenge and are all roughly equivalent to those within a GCSE maths paper. The most recent Government-commissioned survey of adult skills¹ saw 49% of those surveyed achieve Entry Level 3 or lower, which is roughly equivalent to the level expected of a primary school child.



¹ 2011 skills for life survey: a survey of literacy, numeracy and ICT levels in England. 2012. Department for Business Innovation and Skills.

A fifth of the working-age population has the numeracy level equivalent to a GCSE pass (Grade 4)

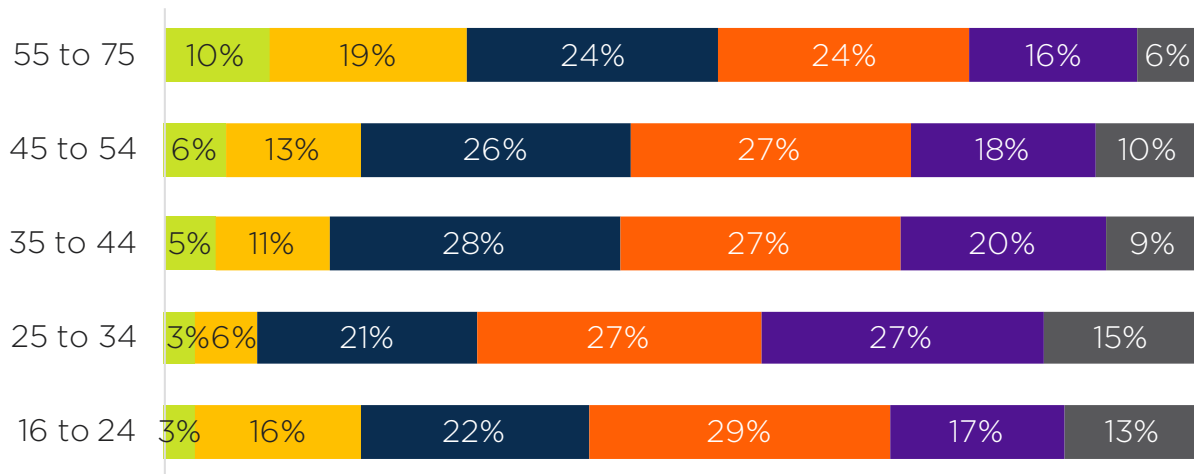
Based on results from a multiple-choice test of people's everyday maths skills, **20%** of the population scored 4 or 5, roughly equivalent to a GCSE pass (Grade 4 / C). This is in line with the last Government-commissioned Skills for Life survey.



Those in older age groups tend to be more numerate than younger people

Number of correct test answers (out of five), by age

■ 5 correct answers ■ 4 correct answers ■ 3 correct answers
■ 2 correct answers ■ 1 correct answer ■ 0 correct answers



“Levels of numeracy across the UK are low by international standards and, if anything, are getting worse over time. This is posing big costs on individuals, economies and societies. It is time to raise awareness of the blight of innumeracy and, most importantly to begin to take steps to improve matters, both among children and adults. National Numeracy Day is a step towards doing so.”

Andy Haldane

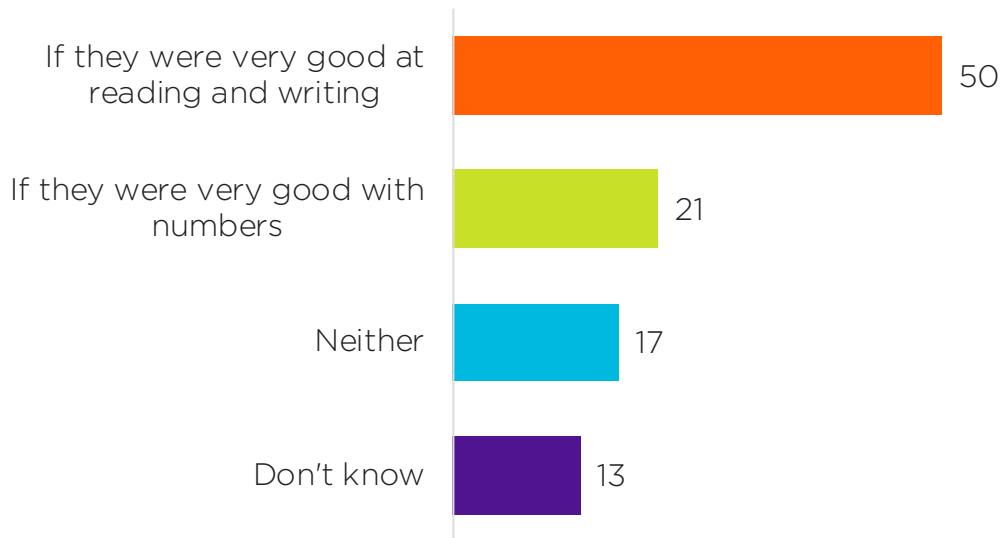
Chief Economist at the Bank of England
and National Numeracy trustee

What the public think about the importance of numeracy skills

The public value maths a lot less than reading and writing

Just **one in five** (21%) say they would be most proud of their child if they were very good at maths and numbers, while more than **twice as many** (50%) would be most proud if their child were very good at reading and writing.

Q: Which of the following would make you most proud of your child?



People are less concerned about being bad with numbers

Nearly **six in 10** (58%) people say they would feel embarrassed to tell someone they were **not good at reading and writing**.



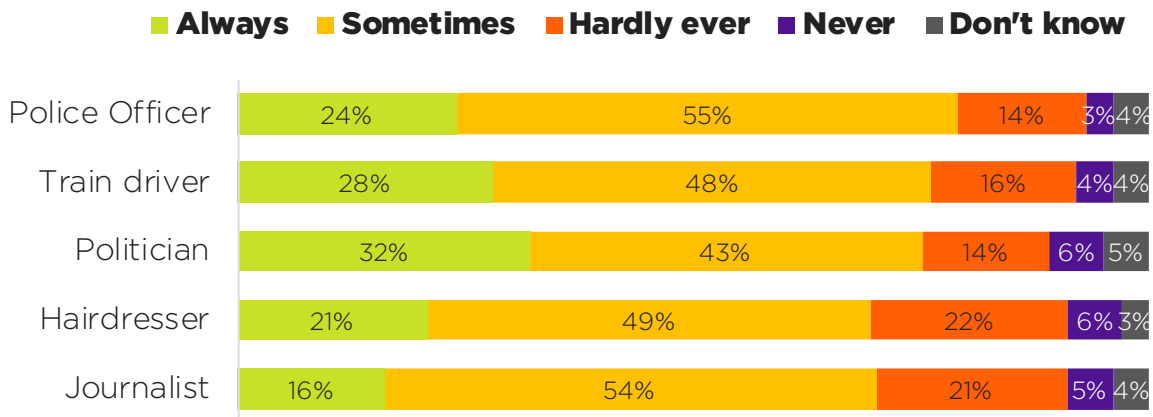
Whereas **under five in 10** (47%) would be embarrassed about **not being good at maths and numbers**.



There is a perception that some people don't need to use numbers and data in their day jobs

Three in 10 think people don't use maths and numeracy at work, including some working in many well-known professions.

Q: How often, if at all, do you think that people who work in the following professions need to use maths and numeracy as part of their day-to-day job?



“We need to change attitudes towards maths, put more positivity in to it ... start helping each other out.”*

Rachel Riley

TV presenter and
National Numeracy ambassador

“We don’t want to shame anyone who isn’t good at maths. We want to encourage them, bring them on, help them forward.”*

Martin Lewis

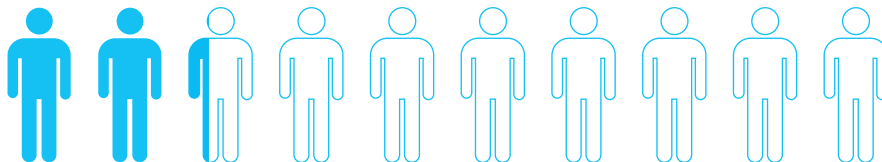
Money Saving Expert and
National Numeracy ambassador

**Lack of confidence
with numbers may
be holding people
back – especially
women**

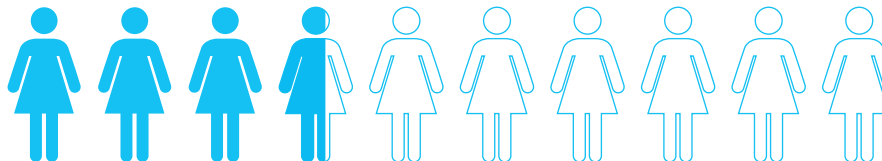
Three in 10 (31%) say they are not a “numbers person”, with women more likely to describe themselves this way

% who say they are “not a numbers person”, by gender

23% of
men



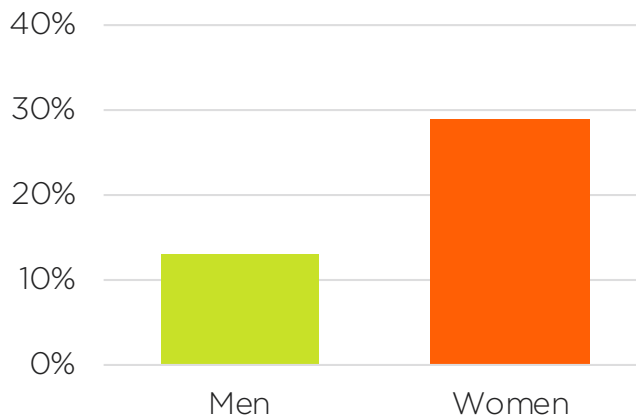
38% of
women



Women are more than twice as anxious as men about using maths and numbers

13% of men say they experience this anxiety, while **29%** of women say they do.

% who say that maths and numbers makes them feel anxious



One in four people would be deterred from applying for a job if it listed using numbers and data as a requirement

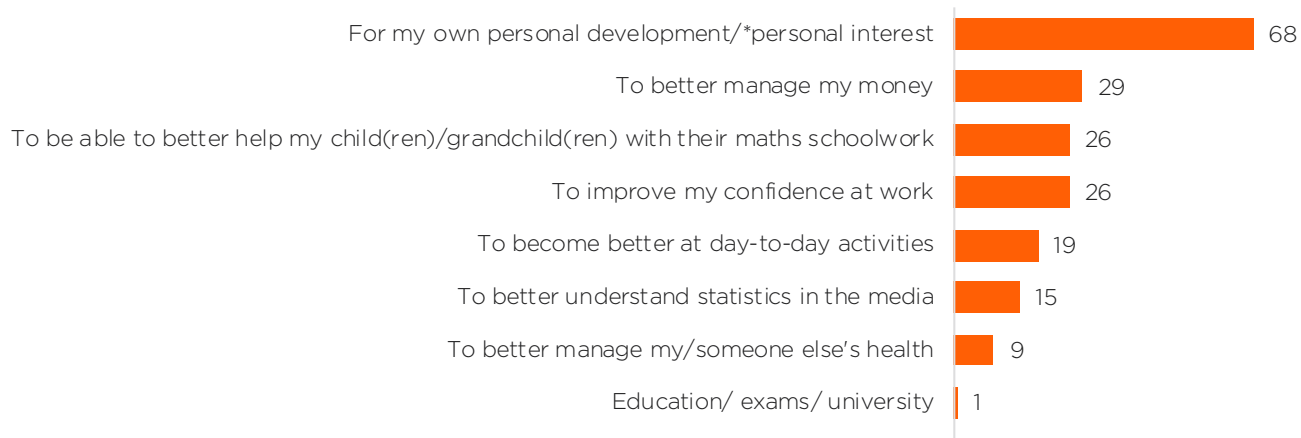
A lack of confidence with numbers is limiting career potential across industries.



A third (36%) say they would like to improve their maths and numeracy skills ...

Among these people, the most common reason given is for personal development, mentioned by **seven in 10** (68%).

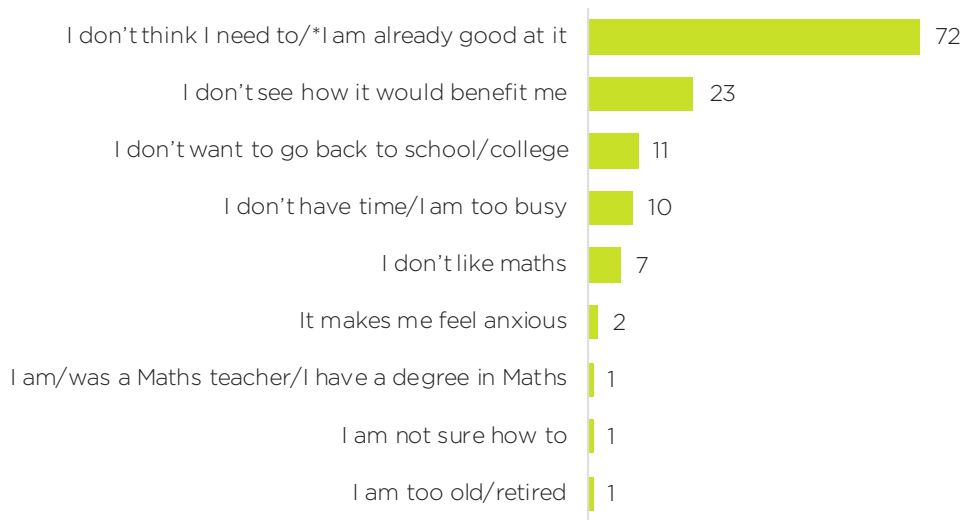
Reasons given for wanting to improve or already improving maths and numeracy skills (%)



... While two in five (43%) say they do not want to improve these skills

The most common reason, mentioned by **seven in 10** (72%) people in this group, is that they don't need to or are already good with numbers.

Reasons given for not wanting to improve maths and numeracy skills (%)



But many people are overrating their level of numeracy

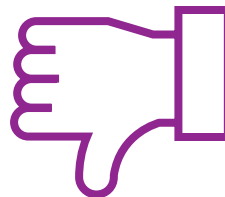
Over a third (37%) of those who rated their maths and numeracy as good actually **scored less than three out of five on the numeracy test...**

... a score which roughly equates to **the level we expect of primary school children.**

Perception



Reality



“Poor numeracy poses a financial cost to the individual and a cost to the economy, estimated to be £20 billion a year. There are simply too many adults in the UK who, through no fault of their own, lack the basic numeracy skills needed in everyday work and life. This is a waste of human and economic capital that we simply can’t ignore.”

Melanie Richards

Deputy Chair, KPMG in the UK

Every business in the UK runs on numbers. It's fundamental – whatever your industry – that employees are numerate.

With one in two working age adults lacking good numeracy skills, the UK risks becoming less competitive at an international level and we must change this. Together we can ensure everyone has the skills to use numbers well, increasing confidence in individuals, communities, businesses and the UK economy as a whole.

We call upon:

Government to turn its attention to improving the skills of the 'forgotten half' of adults whose primary school level numeracy is holding back both them and the country. We propose an efficient, cost-effective way of identifying and addressing poor numeracy across the workforce.

Employers to recognise that some of the many millions of adults who struggle with numeracy may be in their own workplace – and that this has a negative impact on business productivity. We invite firms to work with us to support their employees to get the support they need to become numbers people.

Individuals to turn awareness in to action, and for everyone in the UK to take one simple step towards improved confidence with numbers, by taking the National Numeracy Challenge.

Appendix

For the final part of the survey we'd like to ask a few questions. Please take as long as you like and feel free to use a calculator or pen and paper to help your work out the answers.

Q13. If a scarf costs £11.70 after a 10% reduction, what was the original price? (L1)

- £12.50
- £13.25
- £13.99
- **£13.00**
- I don't know

Q14. Mike's lunch contains 640 calories of energy. What percentage is this of his target daily intake of 2000 calories? (L1)

- 45%
- 62%
- 65%
- **32%**
- I don't know

Q15. Rail tickets increased by 2% in year 1, and 5% in year 2. What was the overall increase over the two years? (L2)

- 7%
- **7.1%**
- 10.0%
- 10.7%
- I don't know

Q16. These are three offers on the same ketchup.

Which is the best value for money? (L2)

- 275g for £1.05
- 454g for £1.99
- **650g for £2.20**
- 425g: buy two for £3.10
- I don't know

Q17. You buy a laptop that costs £899, including VAT at 20%. How much of the purchase price is VAT? (L2)

- £179.80
- £89.80
- £125.00
- **None of these**
- I don't know

About National Numeracy Day

National Numeracy Day is a celebration of numbers and how we use them in everyday life. Its aim is to help everyone in the UK to have the confidence and skills to use numbers well.

It brings together individuals, employers, educators and supporters from across the UK to show the importance of numbers and the benefits of using them more effectively.

For National Numeracy Day 2019, we are encouraging everyone in the UK to take one simple step towards improved confidence with numbers, by taking the National Numeracy Challenge.

The campaign is run by the UK charity National Numeracy and founding supporter KPMG.

Find out more at: www.numeracyday.com