#FunSkills2019

Functional Skills 2019 monthly updates

A closer look at maths

Webinar 10 | June 2019
Welcome to webinar 10 – **deep dive into maths**

**Amanda Kelly**  
Industry Manager

**Katherine Cooper**  
Technical Advisor

**Paul Sceeny**  
Technical Advisor

**Any questions?**

As usual, please post your questions during the webinar. We might not be able to answer them live, but if not we’ll add to the FAQs.
New to these webinars?

If this is your first webinar, you can find the link to the recordings of all previous webinar on our Functional Skills Updates page.

Don’t forget

To stay up-to-date, you need to sign up for our email alerts!
Don’t forget the **draft** samples assessments for all of our reformed FS qualifications are on our **current** Functional Skills (3748) qualification documents webpage.

They are available from a folder called **Functional Skills reform** in the **Additional documents** folder.
Places still available on these events - book your place: bit.ly/CGMathsEnglishEvents

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>16 July</td>
<td>Kendal College</td>
</tr>
<tr>
<td>Tuesday</td>
<td>30 July</td>
<td>PETA, Portsmouth</td>
</tr>
<tr>
<td>Thursday</td>
<td>8 August</td>
<td>City &amp; Guilds office, Warrington</td>
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<tr>
<td>Tuesday</td>
<td>13 August</td>
<td>ILM office, Burntwood</td>
</tr>
<tr>
<td>Monday</td>
<td>19 August</td>
<td>City &amp; Guilds office, London</td>
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Transition from legacy Functional Skills to new qualifications:

<table>
<thead>
<tr>
<th>Date</th>
<th>FS Mathematics</th>
</tr>
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<tbody>
<tr>
<td>31 August 2019</td>
<td>Last candidate registration date</td>
</tr>
<tr>
<td>30 April 2020</td>
<td>Final assessment date for internally assessed components (Entry level and Level 1-2 SLC)</td>
</tr>
<tr>
<td>31 May 2020</td>
<td>Final assessment date for Level 1-2</td>
</tr>
<tr>
<td>31 July 2020</td>
<td>Last date for EQA activity relating to Entry level</td>
</tr>
<tr>
<td>31 August 2020</td>
<td>Final certification date for legacy Functional Skills qualifications</td>
</tr>
</tbody>
</table>
Diving into Level 1 and Level 2 maths
Using the Adult Numeracy Core Curriculum

Reference numbers
Level 1-2 exams

Design/Approach

- Externally set and marked.
- One paper with two sections
  - non-calculator
  - calculator.
- Overall time allowance
  - 1hr 45 min.
- Coverage
  - 80-90% of subject content statements.

Delivery

- Register for levels 1 & 2 using 4748-04.
- Both sections must be taken together.
- Live assessments booked via Walled Garden.
- Paper-delivered or on-screen.
## Assessment specification: Level 1 and Level 2

<table>
<thead>
<tr>
<th></th>
<th>Total marks</th>
<th>Calculator (75%)</th>
<th>Non-Calculator (25%)</th>
<th>Underpinning knowledge (25%)</th>
<th>Problem solving (75%)</th>
<th>Item types</th>
<th>Number of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-calculator</strong></td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>Multiple choice; Short answer fixed response</td>
<td>15</td>
</tr>
<tr>
<td><strong>Section 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Calculator</strong></td>
<td>45</td>
<td>45</td>
<td>0</td>
<td>5</td>
<td>40</td>
<td>Multiple Choice; Short answer fixed response; Short answer open response</td>
<td>15</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>60</td>
<td>45</td>
<td>15</td>
<td>15</td>
<td>45</td>
<td></td>
<td>30</td>
</tr>
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</table>
Level 1 new content

- Follow the order of precedence of operators (SCS7)
- Calculate discounts in multiples of 5% on amounts of money (SCS19)
- Interpret plans, elevations and nets of simple 3-D shapes (SCS25)
- Use angles when describing position and direction, and measure angles in degrees (SCS26)

See gov.uk site for Subject Content document
Examples of how this new content may be assessed…

Calculate discounts in multiples of 5% on amounts of money (SCS19)

A customer wants to buy a coat in a clothes shop. The price ticket says £45. He has a voucher for 30% off. How much money will he have off the price of the coat?

£ ____________

(1 mark)

Interpret plans, elevations and nets of simple 3-D shapes (SCS25)
Level 1 content assessed more explicitly, or in greater detail

- Recognise and use positive and negative numbers (SCS2)  
  N1/L1.2

- Use multiplication facts and make connections with division facts (SCS4)  
  N1/L1.5

- Calculate the squares of one-digit and two-digit numbers (SCS6)  
  N1/L1.6

- Add, subtract, multiply and divide decimals up to two decimal places (SCS11)  
  N2/L1.5

- Approximate by rounding to a whole number or to one or two decimal places (SCS12)  
  N2/L1.7
Level 1 content assessed more explicitly, or in greater detail

Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof (SCS14)

Estimate answers to calculations using fractions and decimals (SCS15)

Recognise and calculate equivalences between common fractions, percentages and decimals (SCS16)

N2/L1.10

N1/L1.9

N2/L1.3

Calculate simple interest in multiples of 5% on amounts of money (SCS18)

Read, write, order and compare percentages in whole numbers (SCS13)

N2/L1.1, N2/L1.3 and N2/L1.4

Suggested activity for N1/L2
Level 1 content assessed more explicitly, or in greater detail

- Group discrete data and represent grouped data graphically (SCS28)
  HD1/L1.2
- Use equally likely outcomes to find the probabilities of simple events and express them as fractions (SCS31)
  HD2/L1.1 and HD2/L1.2
- Calculate the volumes of cubes and cuboids (SCS23)
  MSSL1.10
- Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs (SCS27)
  HD1/L1.2
Types of questions

Add, subtract, multiply and divide decimals up to two decimal places (SCS11)

Group discrete data and represent grouped data graphically (SCS28)
Level 2 new content

- Calculate percentage change (any size increase and decrease), and original value after percentage change (SCS6)
- Follow the order of precedence of operators, including indices (SCS12)
- Calculate using compound measures including speed, density and rates of pay (SCS13)
- Use coordinates in 2-D, positive and negative, to specify the positions of points (SCS19)
- Draw 3-D shapes to include plans and elevations (SCS21)
- Calculate values of angles and/or coordinates with 2-D and 3-D shapes (SCS22)
- Estimate the mean of a grouped frequency distribution from discrete data (SCS24)
- Work out the probability of combined events including the use of diagrams and tables, including two-way tables (SCS26)
- Draw and interpret scatter diagrams and recognise positive and negative correlation (SCS28)

See gov.uk site for Subject Content document
Examples of how this new content may be assessed...

Calculate percentage change (any size increase and decrease), and original value after percentage change.

Q7.
A newspaper report says that a company made £700,000 profit last year. It says this was 12% more than the year before.

Work out how much profit the company made the year before.

Q11.
This table shows how much a garage pays its staff.

<table>
<thead>
<tr>
<th>Pay rates</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working day</td>
<td>Rate</td>
</tr>
<tr>
<td>Monday to Friday</td>
<td>Normal rate</td>
</tr>
<tr>
<td>Saturday or Sunday</td>
<td>$\frac{3}{4}$ x normal rate</td>
</tr>
</tbody>
</table>

Last week, a mechanic worked 7½ hours each day from Monday to Saturday. She did not work on Sunday.
Her normal rate of pay is £10.80 an hour.

Work out her total pay for last week.

Calculate using compound measures including speed, density and rates of pay.
More examples…

Use coordinates in 2-D, positive and negative, to specify the positions of points

Calculate values of angles and/or coordinates with 2-D and 3-D shapes:
More examples of how new content might be assessed

Estimate the mean of a grouped frequency distribution from discrete data:

Q10.
This table shows information about the number of photos a photographer’s customers ordered last week:

<table>
<thead>
<tr>
<th>Photos ordered</th>
<th>Number of customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 9</td>
<td>30</td>
</tr>
<tr>
<td>10 - 19</td>
<td>10</td>
</tr>
<tr>
<td>20 - 29</td>
<td>8</td>
</tr>
<tr>
<td>30 - 39</td>
<td>2</td>
</tr>
<tr>
<td>40 - 49</td>
<td>0</td>
</tr>
<tr>
<td>50 - 59</td>
<td>0</td>
</tr>
</tbody>
</table>

What was the average number of photos per customer?
Give your answer to the nearest whole number.
Greater clarity and more detail

Work out percentages of amounts and express one amount as a percentage of another (SCS5)
N2/L2.8 and N2/L2.9

Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers (SCS7)
N2/L2.1 and N2/L2.4
also N2/L1.1

Express one number as a fraction of another (SCS8)
N2/L2.2

Order, approximate and compare decimals (SCS9)
N2/L2.5
More clarity and depth in content

Add, subtract, multiply and divide decimals up to three decimal places (SCS10)

N2/L2.6

Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders) (SCS17)

MSS1/L2.7, MSS1/L2.8 and MSS1/L2.9

Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting (SCS13)

N2/L2.7 and N2/L2.8
Information
OpenAssess – launched 1 May 2019

OpenAssess is our new, free, on-screen practice test tool – developed for Functional Skills exams

• It’s a parallel, open, version of SecureAssess (e-volve)
  • the platform we use for live on-screen tests.
• It hosts our sample on-screen Functional Skills external assessments
  • instead of these just being on our website.
• It will record your learners’ practice test attempts, and store their responses
  • so you can access and mark them afterwards
  • allows you to provide feedback and judge their readiness for the live test.
• Currently the current (3748) Functional Skills sample assessments are available.
• Sample versions of the reformed (4748) Functional Skills exams will be available through OpenAssess from September.

See OpenAssess webpage for details
Sample assessments

Published sample assessments for Maths and English from Entry 1 to Level 2

- To access them visit the current (3748) Functional Skills qualification documents page:
- Select the ‘Additional Documents’ dropdown
- Then select ‘Functional Skills reform’

NB: the assessment papers and mark schemes have been published as one document.
Questions
Any comments, questions or feedback...

fsreform@cityandguilds.com
Keeping up with developments

#FunSkills2019 webinars every month - right through to the summer

- You'll get an email reminder each month as long as you've signed up.
- Recordings of every session to-date (apart from the special phonics webinar) available from the Functional Skills updates page.

Next month’s webinar

- Wednesday 3 July 2019
Thank you

For more information about the Functional Skills reform programme, please visit cityandguilds.com/mathsandenglish

Then follow links to Functional Skills updates.

There’s a dedicated email address: fsreform@cityandguilds.com

Use #FunSkills2019 to join the social media conversation:
• follow Amanda @MathsEnglish_CG
• follow Paul @PaulSceeny_CG
• follow Katherine @KatherineC_CG