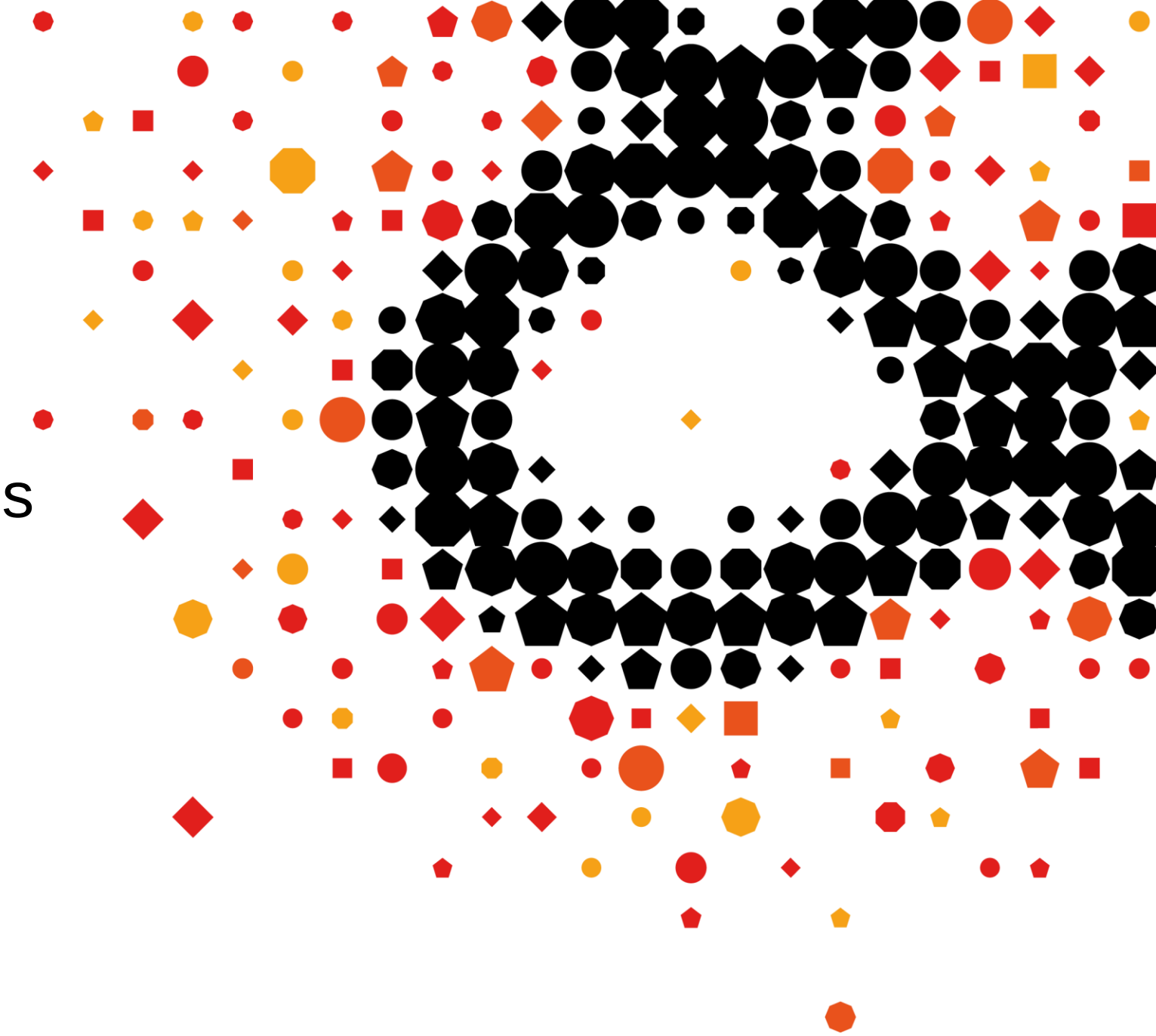
Functional Skills

4748
Reformed Functional Skills
Mathematics



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Meet the team

Paul Sceeny
@PaulSceeny_CG

Amanda Kelly
@MathsEnglish_CG

Katherine Cooper
@KatherineC_CG

Use #CGMathsEnglish to join the social media conversation

Agenda and housekeeping

Outline of the session

- Number
  - Understanding the Subject Content, sharing good practice and activity
- Break
- Using Common Measures, Shape and Space
  - Understanding the Subject Content, sharing good practice and activity
- Handling Information and Data
  - Understanding the Subject Content, sharing good practice and activity
- Support resources
- Next steps

Housekeeping

- Toilets
- Refreshments
- Fire alarm

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Changes

What has changed?

How has your delivery changed from September?

What's new?

What and how are you doing things differently?

Mathematics
Number

Number

- What activities are you currently doing in your classroom to support the delivery of number?
- Good practice to share?
- What should we be delivering in the classroom to meet the SCS?
- What has changed?
- What do the changes look like in the classroom?
  - Consider- impact- delivery- challenges
- How are you going to move learners from L1 to L2?

Subject Content Level 1

1. Read, write, order and compare large numbers (up to one million)
2. Recognise and use positive and negative numbers
3. Multiply and divide whole numbers and decimals by 10, 100, 1000
4. Use multiplication facts and make connections with division facts
5. Use simple formulae expressed in words for one- or two-step operations
6. Calculate the squares of one-digit and two-digit numbers
7. Follow the order of precedence of operators
8. Read, write, order and compare common fractions and mixed numbers
9. Find fractions of whole number quantities or measurements
10. Read, write, order and compare decimals up to three decimal places
11. Add, subtract, multiply and divide decimals up to two decimal places
12. Approximate by rounding to a whole number or to one or two decimal places
13. Read, write, order and compare percentages in whole numbers
14. Calculate percentages of quantities, including simple percentage increases and decreases by 5% and multiples thereof
15. Estimate answers to calculations using fractions and decimals
16. Recognise and calculate equivalences between common fractions, percentages and decimals
17. Work with simple ratio and direct proportion

Subject Content Level 2

1. Read, write, order and compare positive and negative numbers of any size
2. Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation
3. Evaluate expressions and make substitutions in given formulae in words and symbols
4. Identify and know the equivalence between fractions, decimals and percentages
5. Work out percentages of amounts and express one amount as a percentage of another
6. Calculate percentage change (any size increase and decrease), and original value after percentage change
7. Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers
8. Express one number as a fraction of another
9. Order, approximate and compare decimals
10. Add, subtract, multiply and divide decimals up to three decimal places
11. Understand and calculate using ratios, direct proportion and inverse proportion
12. Follow the order of precedence of operators, including indices

Number

Group activity

Using the Subject Content Statements, can you identify examples of how these might be assessed?

Calculator and non calculator…

How do you prepare candidates for the non calculator section of the paper?

- Where can you obtain resources and worksheets?
- Do you teach or have colleagues who teach, GCSE Mathematics? If so what can you 'borrow' from them to help prepare learners?
- What methods of teaching the basics do you use?
- When do you introduce calculators into your sessions?

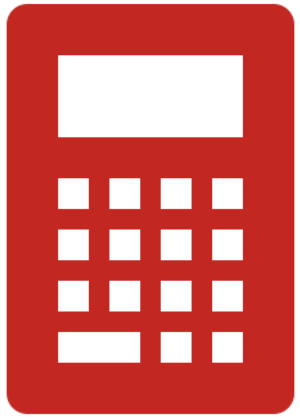
What sort of calculator can candidates use?

- City & Guilds does not specify what type of calculator that can be used during Section 2, the calculator permitted section
- However, programmable calculators or calculators which can connect to the internet are NOT allowed
- Currently candidates taking onscreen Maths exams as Level 1 and 2 are not permitted to use a hand held calculator, instead they must use the onscreen calculator provided. This was a reflection of the difficulty of managing Invigilation of onscreen tests where the candidate can move between the two sections at their own pace
- However…

Calculators in onscreen Functional Skills maths exams

- We have been listening to feedback from centres who say that their candidates would prefer to use their own calculators or scientific calculators which have a greater range of functions during the calculator permitted section of their onscreen maths exams

- We have approached Ofqual about changing our approach and hope to make an announcement about this shortly.



Break

Mathematics
Using Common Measures, Shape and Space

Using Common Measures, Shape and Space

- What activities are you currently doing in your classroom to support the delivery of MSS?
- Good practice to share?
- What should we be delivering in the classroom to meet the SCS?
- What has changed?
- What do the changes look like in the classroom?
  - Consider- impact- delivery- challenges
- How are you going to move learners from L1 to L2?

Subject Content Level 1

1. Calculate simple interest in multiples of 5% on amounts of money
2. Calculate discounts in multiples of 5% on amounts of money
3. Convert between units of length, weight, capacity, money and time, in the same system
4. Recognise and make use of simple scales on maps and drawings
5. Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles
6. Calculate the volumes of cubes and cuboids
7. Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles
8. Interpret plans, elevations and nets of simple 3-D shapes
9. Use angles when describing position and direction, and measure angles in degrees

Subject Content Level 2

1. Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting
2. Convert between metric and imperial units of length, weight and capacity using a) a conversion factor and b) a conversion graph
3. Calculate using compound measures including speed, density and rates of pay (new)
4. Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)
5. 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)
6. Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements
7. Use coordinates in 2-D, positive and negative, to specify the positions of points (new)
8. Understand and use common 2-D representations of 3-D objects
9. Draw 3-D shapes to include plans and elevations (new))
10. Calculate values of angles and/or coordinates with 2-D and 3-D shapes (new)

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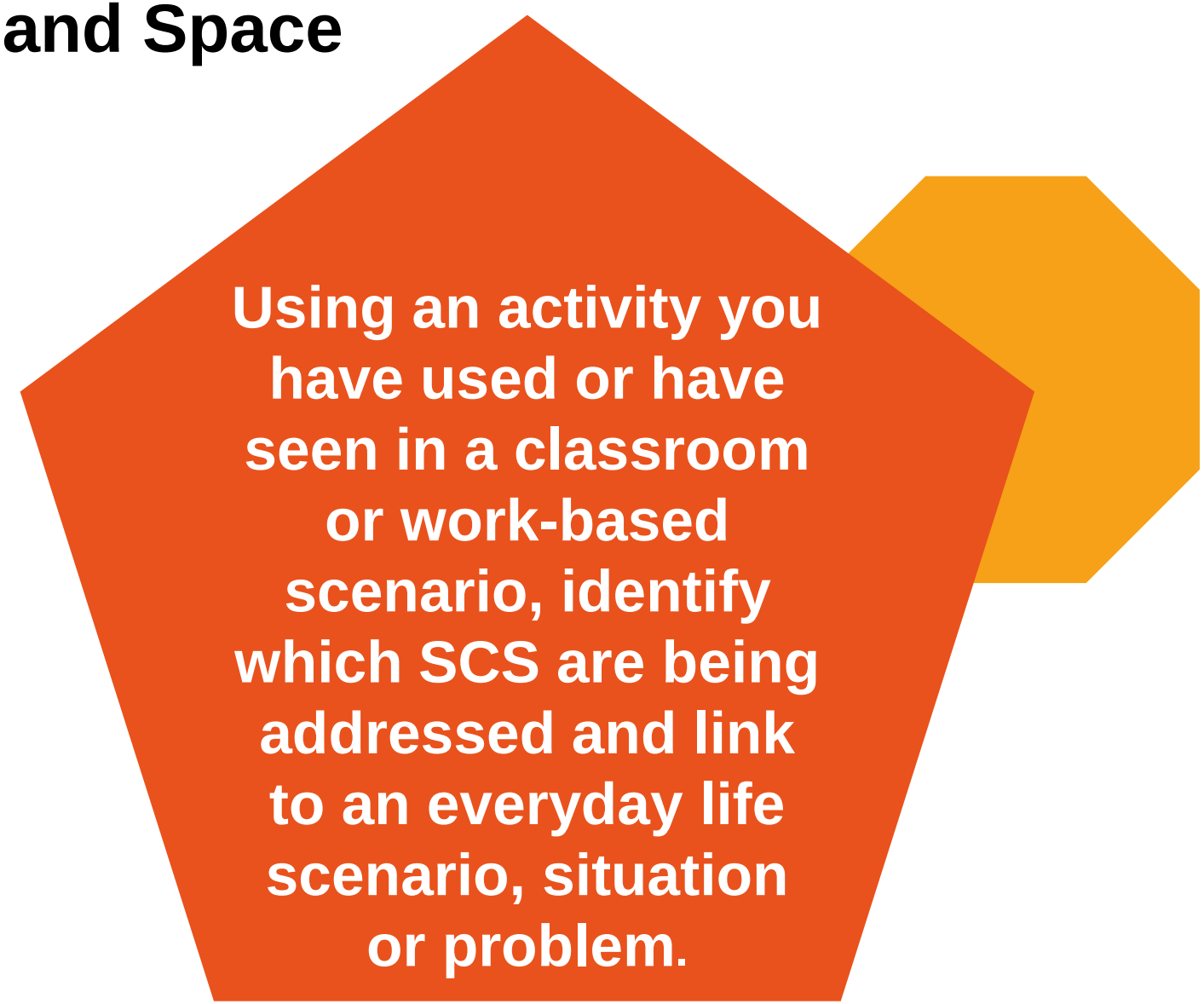
Measure, Shape and Space

Group activity-



Mathematics
Handling Information and Data

Using Handling Information and Data

- What activities are you currently doing in your classroom to support the delivery of Handling Data?
- Good practice to share?
- What should we be delivering in the classroom to meet the SCS?
- What has changed?
- What do the changes look like in the classroom?
  - Consider- impact- delivery- challenges
- How are you going to move learners from L1 to L2?

Subject Content Level 1

1. Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs
2. Group discrete data and represent grouped data graphically
3. Find the mean and range of a set of quantities
4. Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events
5. Use equally likely outcomes to find the probabilities of simple events and express them as fractions

Subject Content Level 2

1. Calculate the median and mode of a set of quantities
2. Estimate the mean of a grouped frequency distribution from discrete data
3. Use the mean, median, mode and range to compare two sets of data
4. Work out the probability of combined events including the use of diagrams and tables, including two-way tables
5. Express probabilities as fractions, decimals and percentages
6. Draw and interpret scatter diagrams and recognise positive and negative correlation

Data

Group activity

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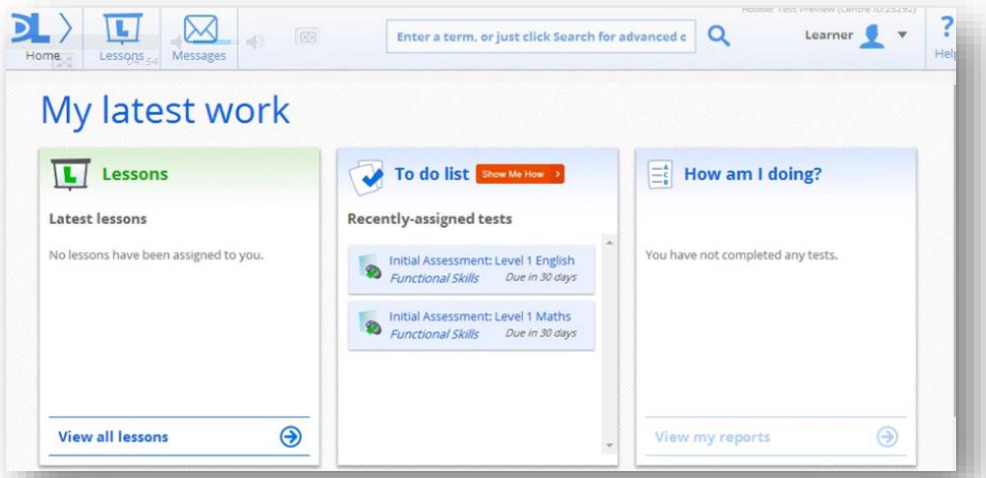
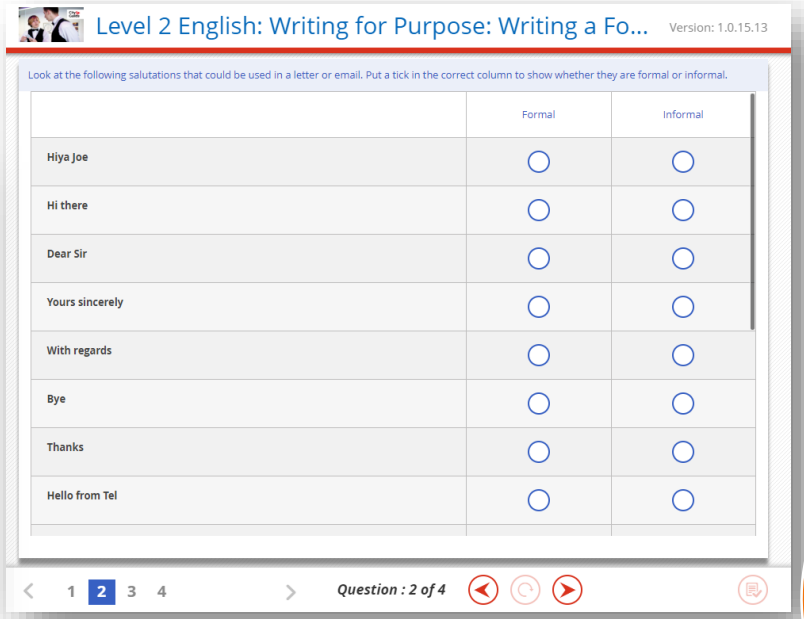
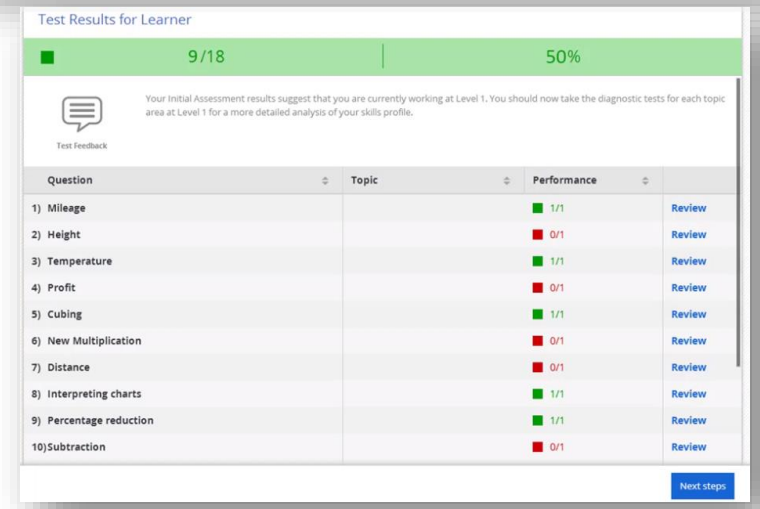
Using the SCS, create an activity and show which SCS these address.

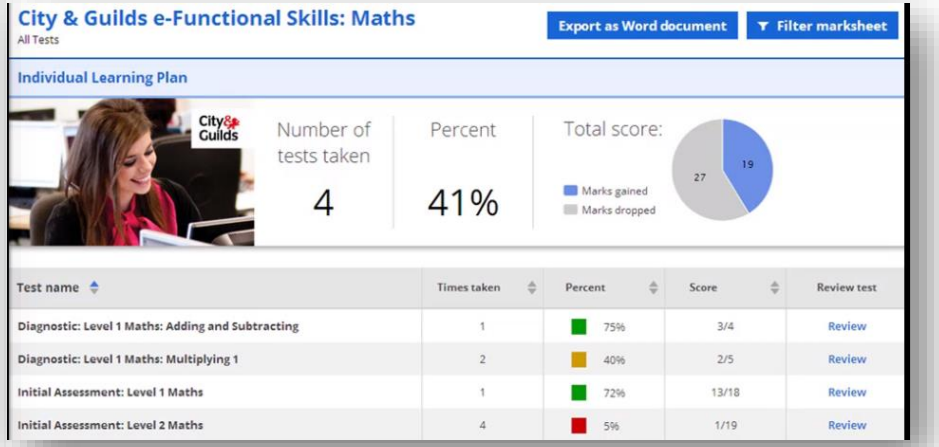
Resources

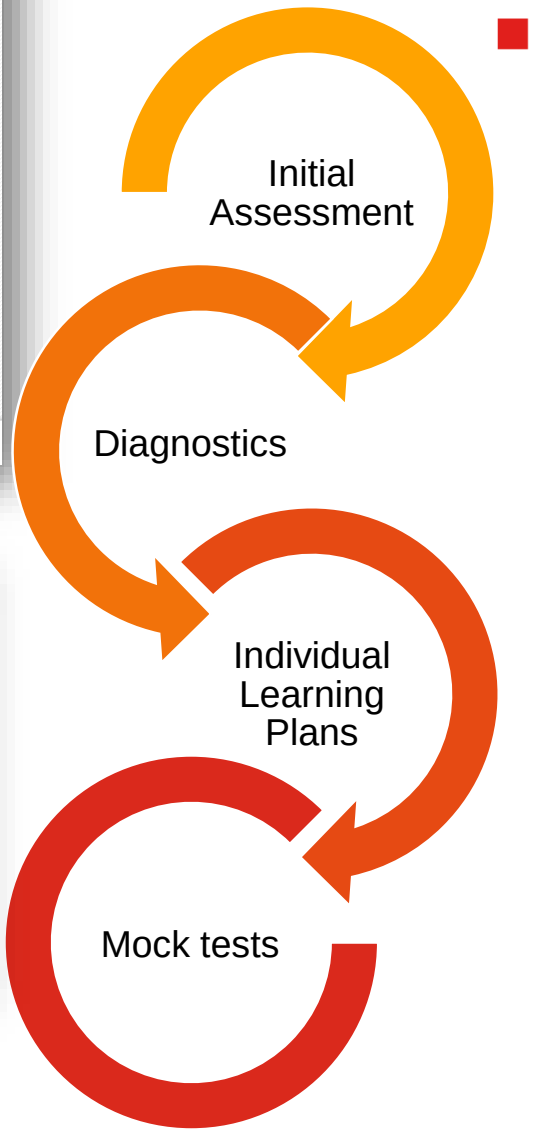
e-Functional Skills









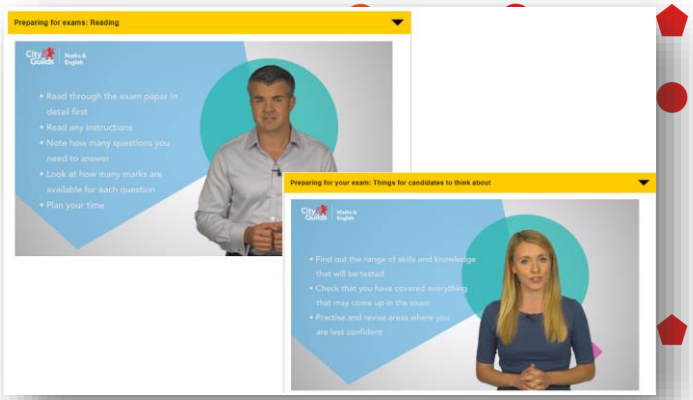


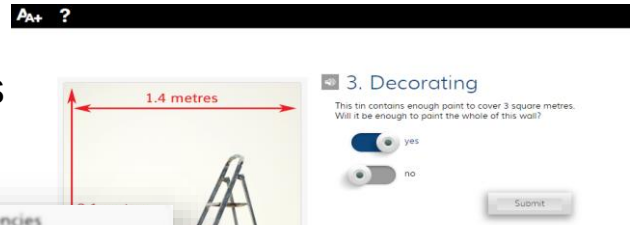
SmartScreen – Maths and English

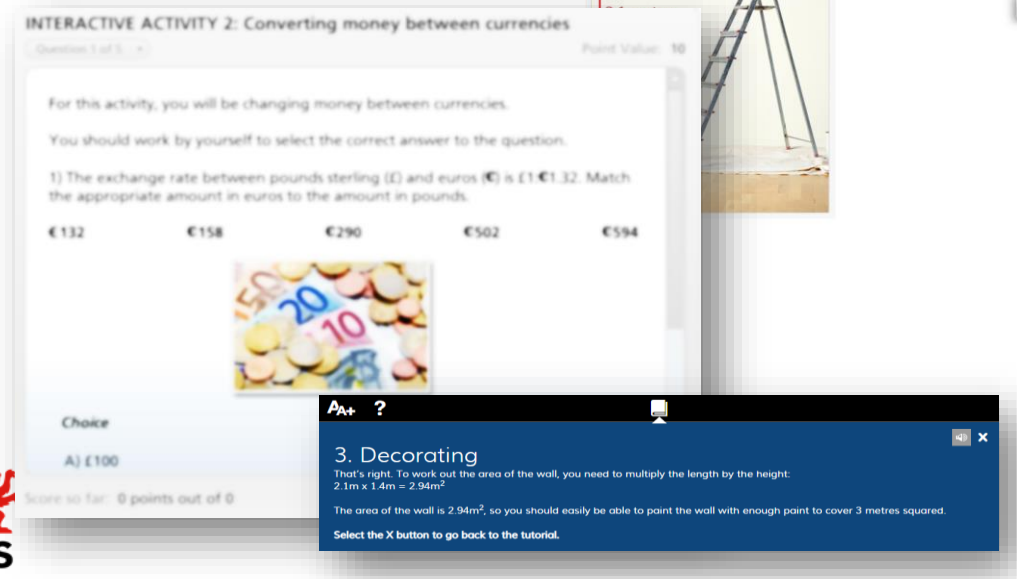
- developing skills activities
- 150 maths and English videos
- interactive e-learning
- worksheets
- classroom games and activities
- card sorts/matching
- exam preparation videos
- speaking and listening videos
- and much more….

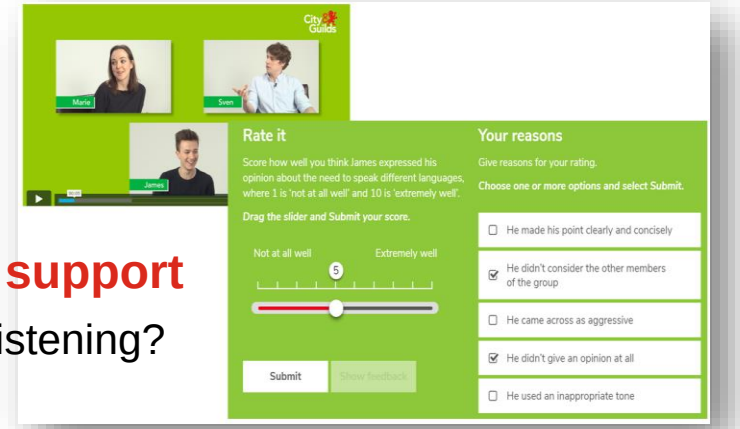
Exam preparation

- Things for candidates to think about
- Things for teachers to think about
- Reading the paper.









Speaking and listening support

- What is speaking and listening?
- Familiar discussions
- Using appropriate language techniques
- Discussing unfamiliar subjects
- Using formal language
- Preparing for presentations
- Delivering presentations

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Resource guides – How do they work?

What needs to be taught

SmartScreen resources available

How to use them

Subject content statement	Resources	How to use this resource
3. Add numbers which total up to 20, and subtract numbers from number up to 20	**Activity 1: Number cards**	Series of number cards to be printed and used in a variety of ways. Type of activity: People maths, Creative Maps to FS content statements E1 1,2,3,4 Use with pairs, small groups or whole class Suggested duration: 5-20 minutes
	Activity 8: Handling data	Learners to create tables and bar charts/block graphs on different subjects Type of activity: Open-ended Maps to FS content statements E1 3, 11, 12, 13 Use with individuals, pairs or small groups: Suggested duration: 30-45 minutes Notes: Squared paper or square sticky notes needed for the creation of bar charts
	Interactive activity 1: Adding and taking away	Use interactively on a screen (PC, tablet), or as a worksheet in class. Suitable also for homework as a worksheet.
	Interactive activity 2: How much shopping?	Use interactively on a screen (PC, tablet), or as a worksheet in class. Suitable also for homework as a worksheet.
	Worksheet 1: Travel times	Use in class or as homework to recognise coins and notes and add numbers.
	Worksheet 2: Food choices	Use in class or as homework to practise recognising, writing and comparing numbers up to 20, completing tables and carrying out calculations.
	Worksheet 4: Short story books	Use in class or as homework to practise sorting and organising numbers and calculating sums.
	Worksheet 5: Party time	Use in class or as homework to practise reading and matching times, carrying out calculations and using a calendar.

Resource guides will also available to support all other literacy/English and numeracy/maths qualifications offered by City & Guilds

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New refreshed SmartScreen for Maths & English

- SmartScreen users will have access to a wealth of engaging maths and English resources in a range of different formats. These cover Functional Skills and will also cover other maths and English qualifications in time.

- Each skill and level will have a **resource guide** which will be driven by the new Functional Skills **subject content.**

- From initial and diagnostic assessments, teachers/tutors will be able to identify the subject content statements learners need to focus on and use our **resource guides** to help build schemes of work and session plans by selecting the best resources to use and learning how to make best use of them.

- There will also be some **developing skills activities** covering a broader range of subject content statements which will suit topic-led learning approaches.

- Resources will support all staff delivering reformed Functional Skills who need to gain a deeper understanding of the subject content, whatever their levels of confidence or experience.

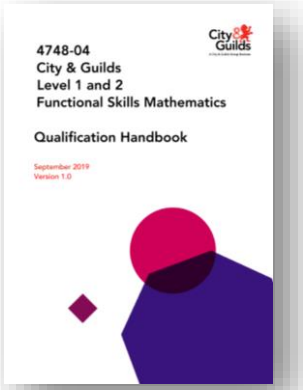
OpenAssess

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.

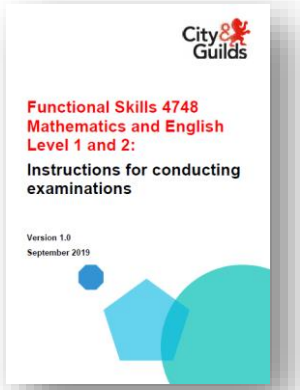
Don’t forget…

Supporting documents



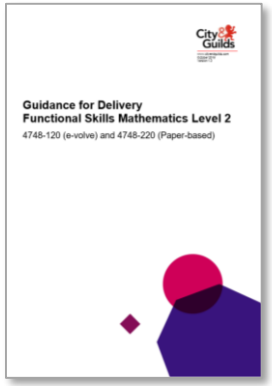
Handbook and specification documents

Sets out scope and design of our Functional Skills qualifications, including assessment coverage and weightings.



Instructions for conducting exams

Sets out our operational requirements for managing externally marked exams.



Guidance for delivery

Produced by our chief examiner: detailed guidance on design of, and allocation of marks within, our externally marked exams.

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Questions answers

Further support…

Technical Advisors

Available to support you through the transition to reformed Functional Skills and beyond

Networks

Support you and encourage sharing of best practice

Monthly webinar updates

Keep you up to date monthly and provide ongoing support

Functional Skills Admin and Support Hub

Support with any specific aspects of reformed Functional Skills you need more help with including ‘How to…’ series of recorded presentations

CPD

Teaching and learning English and Maths.

Network event slides

You can download a PDF of the slides used in the network event

Useful links

- Contacting City & Guilds – for details visit Contacting City & Guilds
- For updates on the Functional Skills reforms – visit Functional Skills Updates
- For more detailed qualification information Reformed Functional Skills (4748)
- Our FAQs also provide useful information and can also be found on the qualification page

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