

STEP

D-Rag

Teachers' notes

Digital Rapid Assessment Guide (D-RAG)
for nomadic learners

ASSESSMENT FOCUS: NUMERACY

This resource focusses on Numeracy across Curriculum for Excellence (CfE) Early, First and Second levels.

Teachers' Notes D-Rag – Numeracy

KEY POINTS

- ▶ Gypsy/Traveller learners may only be in school for a short time.
- ▶ Gypsy/Traveller learners should be 'fast tracked' so that they can progress quickly and experience success in the different subject areas.
- ▶ Gypsy/Traveller learners should be included in peer group learning and teaching wherever possible.
- ▶ Use culturally appropriate resources, for example stories and pictures from the Gypsy/Traveller community.
- ▶ Use initial discussions about travelling, home culture and types of learning within the family to gauge the child's interest, learning styles and range of abilities.

Who is this resource for?

- ▶ The Digital Rapid Assessment Guide (D-RAG) is designed to support teachers working with Gypsy/Traveller learners.

What does it do?

- ▶ The resource gives a pathway through assessment of children's abilities using accessible activities and cultural resources. It is particularly useful when children arrive or return after periods of travelling.

How should it be used?

- ▶ There are three separate D-RAG resources. They highlight Curriculum for Excellence (CfE) experiences, outcomes and benchmarks in numeracy, reading and writing as initial assessment priorities. However, where possible, the assessments should be introduced as part of an integrated learning context that recognises a child's strengths and cultural interests.

Remote learning

- ▶ Links for activities which can be used when travelling have been included where appropriate.

D-RAG: Numeracy

This resource focusses on Numeracy across Curriculum for Excellence (CfE) Early, First and Second levels.

- ▶ In the following pages you can align Key Outcomes and Benchmarks with pupil learning activities offering a way to assess the pupils' levels.
- ▶ Included are CfE links, oral instructions and/or strategies to support the activity.
- ▶ It is not intended that learners should work through the entire guide. Teachers should select the appropriate pages for assessing specific learners.

Assessment opportunities

- ▶ What observations do learners make?
- ▶ How much scaffolding did they require?
- ▶ Can they make links between mathematical concepts?
- ▶ What prior learning are they processing?
- ▶ What conclusions do learners draw?
- ▶ Are there any misconceptions that need addressed?
- ▶ Are there any gaps in learning?

Assessment activities – Numeracy

EARLY LEVEL NUMERACY ASSESSMENT

Number, money and measurement (NMM)/Number recognition

Preparation, materials and activities



What you need

- [Learner record](#)
- Practical materials – beads, counters, blocks etc (optional)

What you do

- Ask the learner if they recognise the numbers, which ones do they recognise?
- What is the number between?
- What is the number before/after?
- Ask the learner to count backwards from 10/20/30
- How many stars?
- How many triangles?
- How many red shapes?
- What is one less than/more than?
- Play 'How many?' games
- On the online D-RAG, mark-up tools can be used to draw round numbers

Differentiation/additional resources

- [Mathsbot](#) – tools for counting
- [Mathsbot](#) – subitising
- [Mathsbot](#) – manipulatives
- [Subitising](#) (I see maths)



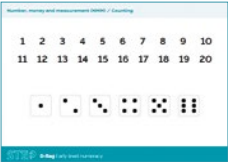
Key outcomes and benchmarks

I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. **MNU 0-02a**

- * Recalls number sequence.
- * Identifies and recognises numbers.

I can use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. **MNU 0-03a**

- * Recalls the number sequence forwards within the range 0 – 30, from any given number.
- * Uses the language of before, after and in-between.
- * Counts on and back in ones to add and subtract.
- * Uses appropriately the mathematical symbols +, – and =.
- * Uses one-to-one correspondence to count a given number of objects to 20.
- * Identifies 'how many?' in regular dot patterns, for example, arrays, five frames, ten frames, dice and irregular dot patterns, without having to count (subitising).
- * Uses ordinal numbers in real life contexts, for example, 'I am third in the line'.

Number, money and measurement (NMM)/Counting		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Learner record • Dominoes (optional) • Dice (optional) What you do • Practice counting on and back • Play dominoes, promote recognition of patterns • Play games with dice Differentiation/additional resources • Mathsbot – dice  • Mathsbot – dominoes  • Playing with dice (nrich)	I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a * Identifies 'how many?' in regular dot patterns, for example, arrays, five frames, ten frames, dice and irregular dot patterns, without having to count (subitising).

Number, money and measurement (NMM)/Number sequence

Preparation, materials and activities



What you need

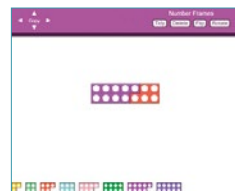
- [Learner record](#)
- Numicon or similar (optional)
- [Numicon activities](#) (optional)

What you do

- Ask the learner to tell you the missing numbers
- Use the numicon activities

Differentiation/additional resources

- [Mathsbot](#) – number frames



- [Caterpillar sequencing](#) (Topmarks)
- [Numberframes](#) (I see maths)

Key outcomes and benchmarks

I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order.
MNU 0-02a

* Recalls number sequence.

Number, money and measurement (NMM)/Adding and subtracting

Preparation, materials and activities

Number, money and measurement (NMM) / adding and subtracting

1+3	15+3	6-3	18-3
2+6	11+5	4-1	20-5
4+5	10+2	8-5	15-6
4+2	16+4	3-0	12-4

What you need

- Learner record
- [Number to 20 PDF resources](#)

Number 0-20

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
0			

What you do

- Play snap, number rhymes, order number cards, matching games, etc.
- If learner is confident, attempt sums without concrete materials

Differentiation/additional resources

- [Number activities](#) (Doorway online)
- [Todays Number – up to 20](#) (Topmarks)
- [Helicopter Rescue](#) (Topmarks)
- [Numbers to 20 activity](#) (Primary Stars)
- [Ordering numbers](#) (ictgames)

Key outcomes and benchmarks

I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a

* Counts on and back in ones to add and subtract.

* Uses appropriately the mathematical symbols +, – and =.

Number, money and measurement (NMM)/Recognition – coins

Preparation, materials and activities



What you need

- Learner record
- Real coins to £2 (preferable)

What you do

- Ask learner to identify coins to £2
- Ask learner to order from smallest value
- Ask learner how many 1p's in 10p etc
- Using technology, this page can be interactive, for example:
Draw a circle round the coins that make 5p

Differentiation/additional resources

- [Coins game](#) (topmarks)



- [Toy shop money game](#) (topmarks)

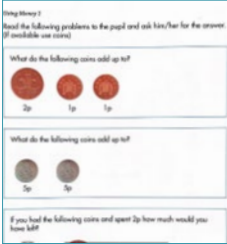


- [Cashing in](#) (doorway online)
- [Coin calculator](#) (ictgames)
- [Spot the coins](#) (Natwest Moneysense)

Key outcomes and benchmarks

I am developing my awareness of how money is used and can recognise and use a range of coins.
MNU 0-09a

- * Identifies all coins to £2.
- * Applies addition and subtraction skills and uses 1p, 2p, 5p and 10p coins to pay the exact value for items to 10p.

Number, money and measurement (NMM)/Using money to 20p		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Learner record • Real coins and notes (preferable) • PDF Money resources What you do • Can the learner use the vocabulary of money? • Does the learner use the vocabulary of counting, addition and subtraction? • Observe how the learner is using, understanding and recognising coins to 10p • Using technology, this page can be interactive, for example: Draw a circle round the two coins that make 10p  Differentiation/additional resources • Price lists (topmarks) • Coin cruncher (Natwest Moneysense)	I am developing my awareness of how money is used and can recognise and use a range of coins. MNU 0-09a * Identifies all coins to £2. * Applies addition and subtraction skills and uses 1p, 2p, 5p and 10p coins to pay the exact value for items to 10p.

Number, money and measurement (NMM)/Time

Preparation, materials and activities



What you need

- Learner record
- [PDF printouts](#) (optional)
- [Interactive clock](#)/teaching clock

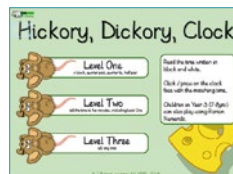


What you do

- Set a time on the clock and ask the learner what time it is
- Ask the learner to set the correct time given
- Ask the learner what the time is 1 hour later or if a journey took 1 hour, what time would they arrive?
- Ask the learner if they know when their birthday is, in what season is their birthday?
- Ask the learner if they know what the current season is

Differentiation/additional resources

- [Hickory Dickory Clock game](#) (ictgames)



- [About time \(doorway online\)](#)



Key outcomes and benchmarks

I am aware of how routines and events in my world link with times and seasons, and have explored ways to record and display these using clocks, calendars and other methods. MNU 0-10a

- * Reads analogue and digital o'clock times (12 hour only) and represents this on a digital display or clock face.
- * Links daily routines and personal events to time sequences.

Number, money and measurement (NMM)/Measure		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Learner record • Variety of items for measuring e.g. paperclip, book • Variety of items (Lego, bottles of liquid, string, etc) depicting more/less, tall/small, short/long (optional) What you do • Use paperclip/book to measure items e.g. table, rug, door, etc • Ask the learner to use the lego to show tall and small • Ask the learner to use the bottles to show more and less • Ask the learner to use the string to show short and long Differentiation/additional resources • Let's compare (topmarks) • Mostly Postie (ict games) • Measuring in cm (topmarks)	I have experimented with everyday items as units of measure to investigate and compare sizes and amounts in my environment, sharing my findings with others. MNU 0-11a * Shares relevant experiences in which measurements of lengths, heights, mass and capacities are used, for example, in baking. * Describes common objects using appropriate measurement language, including tall, heavy and empty. * Compares and describes lengths, heights, mass and capacities using everyday language, including longer, shorter, taller, heavier, lighter, more and less. * Estimates, then measures, the length, height, mass and capacity of familiar objects using a range of appropriate non-standard units.

Shape, position and movement (SPM)/2D shape

Preparation, materials and activities



What you need

- Learner record
- 2D shapes (optional)

What you do

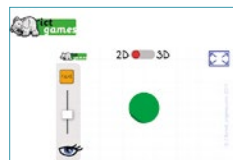
- Ask learner to name the 2 D shapes
- Discuss the objects using terminology such as straight, round, etc
- Ask the learner to sort the shapes into groups e.g. same shape, same colour
- Make a repetitive pattern, ask learner to continue the pattern

Differentiation/additional resources

- [Shape patterns](#) (topmarks)



- [Shape monsters](#) (topmarks)
- [Shifting shapes](#) (ictgames)



- [BBC 2D and 3D shapes](#)

Key outcomes and benchmarks

I enjoy investigating objects and shapes and can sort, describe and be creative with them.
MTH 0-16a

- * Recognises, describes and sorts common 2D shapes and 3D objects according to various criteria, for example, straight, round, flat and curved.

I can explore computational thinking processes involved in a variety of everyday tasks and can identify patterns in objects or information.
TCH 0-13a

- * Uses knowledge of colour, shape, size, etc to match and sort items in a variety of ways.
- * Collects and organises objects for a specific purpose.

Shape, position and movement (SPM)/2D and 3D shape		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Range of 3D shapes or objects (preferable) • Construction materials (optional)	I enjoy investigating objects and shapes and can sort, describe and be creative with them. MTH 0-16a * Recognises, describes and sorts common 2D shapes and 3D objects according to various criteria, for example, straight, round, flat and curved.
	What you do • Identify 3D shapes or objects • Discuss sides, corners, edges, etc • Identify the 2D shapes in 3D shapes • Build towers or structures with physical shapes/objects Differentiation/additional resources • BBC 2D and 3D shapes • What are 3D shapes? (BBC) • Properties of shape (Nrich) • Shape (STEM learning)	

Information handling (IH)/Sorting and matching

Preparation, materials and activities



What you need

- Learner record
- Sorting materials e.g. leaves, sticks, buttons, counters, lego, etc (optional)

What you do

- Sort items into groups e.g. baby/adult or living/non-living
- Discuss relationships between items
- With learner collect leaves to sort by size and/or colour

Differentiation/additional resources

- [Matching and sorting activities](#) (Early Learning HQ)
- [Same or different](#) (doorway online)
- [Find the pairs](#) (doorway online)
- [Sid the science kid sorting box](#) (PBS kids)



Key outcomes and benchmarks

I can explore computational thinking processes involved in a variety of everyday tasks and can identify patterns in objects or information.

TCH 0-13a

- * Uses knowledge of colour, shape, size, etc to match and sort items in a variety of ways.
- * Collects and organises objects for a specific purpose.

FIRST LEVEL NUMERACY ASSESSMENT

Number, money and measurement (NMM)/Place value

Preparation, materials and activities



What you need

- Learner record
- [Online abacus](#) (ict games)
- Physical resources e.g. Dienes/Cuisenaire materials, straws (optional)
- Whiteboard and pen

What you do

- Ask learner to write down numbers from the abacus
- Ask learner to order numbers from smallest to largest or vice versa
- Write additional numbers on whiteboard and ask learner to order numbers
- Ask learner to show you a number using the Dienes/Cuisenaire materials

Differentiation/additional resources

- [Place value charts](#) (topmarks)
- [More place value charts](#) (topmarks)
- [Bead numbers](#) (topmarks)
- [Play your cards right counting/ordering](#) (ict games)
- [Lifeguards](#) (ict games)
- [Further place value games](#) (ict games)



Key outcomes and benchmarks

I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. MNU 1-02a

* Uses numbers to 1000.

* Understands place value.

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 1-03a

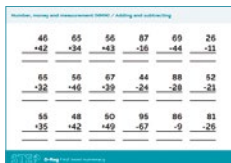
* Solves addition and subtraction with 3 digit whole numbers.

* Can use multiplication and division facts to solve numbers to 1000.

* Multiplies and divides whole numbers by 10 and 100.

Number, money and measurement (NMM)/Adding and subtracting

Preparation, materials and activities



What you need

- Learner record
- Place value materials (optional)
- Whiteboard and pen/pencil and paper
- [Additional numbers to 100 PDF resources](#) (optional)
- [Additional numbers to 1000 PDF resources](#) (optional)

What you do

- Ask learner to copy and complete sums on whiteboard or paper
- Technology could be used by taking a screenshot of the page and using mark up tools to complete sums

Differentiation/additional resources

- [BBC bitesize addition and subtraction](#)
- [Number sense and place value](#) (rich)
- [Bead sticks](#) (mathsframe)
- [Handy counters subtraction](#) (ict games)
- [Mental addition](#) (ictgames)
- [Mummy numberlines addition and subtraction](#) (ictgames)
- [Online place value chart](#) (mathsbot.com) (optional)



Key outcomes and benchmarks

I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. MNU 1-02a

* Uses numbers to 1000.

* Understands place value.

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 1-03a

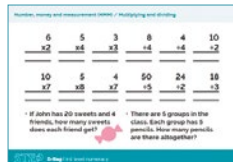
* Solves addition and subtraction with 3 digit whole numbers.

* Can use multiplication and division facts to solve numbers to 1000.

* Multiplies and divides whole numbers by 10 and 100.

Number, money and measurement (NMM)/Multiplying and dividing

Preparation, materials and activities



What you need

- Learner record
- Whiteboard and pen/pencil and paper
- [Additional numbers to 100 PDF resources](#) (optional)

33x40=	
21x79=	
31x11=	
13x80=	
33x40=	
99x31=	
47x34=	

- [Additional numbers to 1000 PDF resources](#) (optional)

134 + 136 -----	332 + 143 -----	341 + 234 -----	234 + 137 -----	879 + 22 -----
403 - 222 -----	479 - 458 -----	989 - 99 -----	345 - 47 -----	876 - 859 -----

- [Visual times tables games](#) (optional)

What you do

- Ask learner to copy and complete sums on whiteboard or paper
- Technology could be used by taking a screenshot of the page and using mark up tools to complete sums

Differentiation/additional resources

- [Hit the button](#) (topmarks)
- [Multiplication square](#) (mathsbot.com)
- [Multiplication and division](#) (ictgames)

Key outcomes and benchmarks

I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value. MNU 1-02a

* Uses numbers to 1000.

* Understands place value.

I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed. MNU 1-03a

* Solves addition and subtraction with 3 digit whole numbers.

* Can use multiplication and division facts to solve numbers to 1000.

* Multiplies and divides whole numbers by 10 and 100.

Number, money and measurement (NMM)/Recognition – coins and notes

Preparation, materials and activities



What you need

- Learner record
- Real coins and notes to £20 (preferable)
- [Additional money PDF resources](#) (optional)
- Whiteboard and pen (optional)

What you do

- Ask learner to identify coins and notes to £20
- Write amounts on the whiteboard, ask learner to identify which coins/notes would be used to purchase items at 72p, 68p, £1.50, £2.75, £6.90, £15.20 etc. [extend or modify as required]
- Technology could be used to circle the coins which can be used to pay for goods

Differentiation/additional resources

- [Toy shop money game](#) (topmarks)



- [Coins game](#) (topmarks)



- [The change game](#) (Natwest Moneysense)

Key outcomes and benchmarks

I can use money to pay for items and can work out how much change I should receive. MNU 1-09a

* Identifies and uses all coins and notes to £20, explores different ways of making same total.

I have investigated how different combinations of coins and notes can be used to pay for goods or be given in change. MNU 1-09b

* Can give pay and give change for items to £10.

Number, money and measurement (NMM)/Time

Preparation, materials and activities



What you need

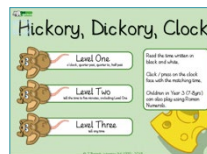
- Learner record
- [Interactive clock](#)/teaching clock
- [Time PDF resources](#) (optional)

What you do

- Set a time on the clock and ask the learner what time it is. Use o'clock, half past, quarter past/to
- Ask the learner to set the correct time given. Use o'clock, half past, quarter past/to
- Using a digital clock, ask the learner to show the time on an analogue clock and vice versa
- Using the printable sheet, match the o'clock, half past and quarter to/past times
- Using the printable sheets, order the days of the week, months of the year and relate to seasons

Differentiation/additional resources

- Use a calendar to find birthdays
- Use a bus timetable to find bus times
- [Teaching clock](#) (topmarks)
- [Hickory Dickory clock](#) (ict games)



Key outcomes and benchmarks

I can tell the time using 12-hour clocks, realising there is a link with 24 hour notation, explain how it impacts on my daily routine and ensure that I am organised and ready for events throughout my day. MNU 1-10a

* Tells time using half past, quarter past/to in digital and analogue.

I can use a calendar to plan and be organised for key events for myself and my class throughout the year. MNU 1-10b

* Uses calendars and timetables to plan.

* Orders months of year and relates to seasons.

Number, money and measurement (NMM)/Measuring

Preparation, materials and activities



What you need

- Learner record
- Suitable objects to compare
- Range of measuring tools – ruler, tape measure, scales, jug etc.

What you do

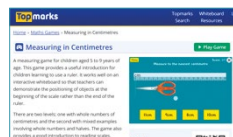
- Ask the learner to guess how long the objects might be
- What would they use to measure them?
- What would be the unit used on the ruler?
- Put different items on the scales to show different weights
- If possible use a variety of measuring tools to assess ability to read measurements

Differentiation/additional resources

- [Mostly postie](#) (ict games)



- Measuring in cm (topmarks)



- [Reading scales](#) (transum maths)

Key outcomes and benchmarks

I can estimate how long or heavy an object is, or what amount it holds, using everyday things as a guide, then measure or weigh it using appropriate instruments and units. MNU 1-11a

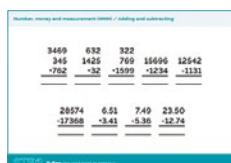
- * Uses knowledge of everyday objects to provide reasonable estimates of length, height, mass and capacity.
- * Makes accurate use of a range of instruments including rulers, metre sticks, digital scales and measuring jugs when measuring lengths, heights, mass and capacities using the most appropriate instrument for the task.

Number, money and measurement (NMM)/Data analysis		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Learner record • Squared paper (optional) • iPad with Numbers/laptop with Excel (optional) What you do • What type of graphs are these? • What is the most popular pet in the class? • What is the least popular pet? • How many more... • What is the total number of pet in the class? • Do we know if anyone else in the class had no pets? • Which months had most sales? • Which months had the least sales? • What information is missing from this pie chart? Differentiation/additional resources • Carry out a survey and create a graph and chart using squared paper or technology • Bar charts (maths frame) • BBC Bitesize data handling • Data handling (rich) 	I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. MNU 1-20a * Asks and answers questions to extract key information from a variety of data sets including charts, diagrams, bar graphs and tables.

SECOND LEVEL NUMERACY

Number, money and measurement (NMM)/Adding and subtracting

Preparation, materials and activities



What you need

- Learner record
- Numbers to 10,000 PDF printable (optional)
- Whiteboard and pen or paper and pencil

What you do

- Ask learner to copy and complete the sums on a whiteboard or paper
- Extend using the PDF printout
- Technology could be used by taking a screenshot of the page and using mark up tools to complete sums

Differentiation/additional resources

- Use problem solving activities to extend assessment e.g. [addition and subtraction KS2](#) (nrich)
- [BBC bitesize maths and numeracy](#)
- [BBC bitesize problem solving](#)

Add, subtract, multiply and divide:
Ask the pupil to complete the following on this sheet or using paper provided:

4146 345 + 789 _____	498 5100 + 789 _____	3081 1097 + 123 _____
2198 - 399 _____	678 - 89 _____	987 - 199 _____
29 x 6 _____	85 x 8 _____	93 x 7 _____

Key outcomes and benchmarks

I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value. MNU 2-02a

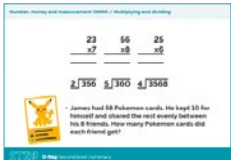
- * Uses and understands numbers to 1000000.
- * Solves addition and subtraction with 3 digit whole numbers.
- * Uses multiplication and division facts to the 10th multiplication table.

Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others. MNU 2-03a

- * Multiplies and divides whole numbers by multiples of 10, 100 and 1000.
- * Multiplies whole numbers by two digit numbers.

Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems. MTH 2-03c

- * Applies the correct order of operations in number calculations when solving multi-step problems.

Number, money and measurement (NMM)/Multiplying and dividing		
Preparation, materials and activities		Key outcomes and benchmarks
 23 56 25 x2 x8 x5 ----- 46 448 125 James had 68 Pokémon cards. He kept 15 for himself and shared the rest evenly between his 8 friends. How many Pokémon cards did each friend get?	What you need • Learner record • Whiteboard and pen or paper and pencil What you do • Ask learner to copy and complete the sums on a whiteboard or paper • Technology could be used by taking a screenshot of the page and using mark up tools to complete sums • Ask learner to recite times tables Differentiation/additional resources • Multiplication square (mathsbot) • Tug of war times tables (ict games) • Multiplication and division KS2 (nrich) • Multiplication games 	I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value. MNU 2-02a * Uses and understands numbers to 1000000. * Solves addition and subtraction with 3 digit whole numbers. * Uses multiplication and division facts to the 10th multiplication table. Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others. MNU 2-03a * Multiplies and divides whole numbers by multiples of 10, 100 and 1000. * Multiplies whole numbers by two digit numbers. Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems. MTH 2-03c * Applies the correct order of operations in number calculations when solving multi-step problems.

Number, money and measurement (NMM)/Speed-distance-time

Preparation, materials and activities



What you need

- Learner record
- Whiteboard and pen or paper and pencil

What you do

- Ask learner to complete calculations using the speed/distance/time triangle

- This resource can be used to support the learner

[How to calculate speed, distance and time](#)

Differentiation/additional resources

- Extend assessment using this [Glow worksheet](#)

- [Further speed/distance/time resources](#)

Key outcomes and benchmarks

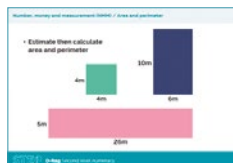
I can use and interpret electronic and paperbased timetables and schedules to plan events and activities, and make time calculations as part of my planning. MNU 2-10a

- * Estimates duration of a journey based on knowledge of the link between speed, distance and time.

Number, money and measurement (NMM)/Using timetables		
Preparation, materials and activities		Key outcomes and benchmarks
	What you need • Learner record • Whiteboard and pen or paper and pencil • Radio Times or similar (optional) What you do • What time does the film, Bug's Life start? • What time does the Cricket finish? • If you watch all the news at 6pm, will you see the start of Neighbours? • Plan an evening viewing using a Radio Times or online TV schedule Differentiation/additional resources • White Rose Education Timetables video	I can use and interpret electronic and paper based timetables and schedules to plan events and activities, and make time calculations as part of my planning. MNU 2-10a * Reads and records time in both 12 and 24 hour and converts between two. * Uses and interprets a range of electronic and paper based timetables and calendars to plan events.

Number, money and measurement (NMM)/Area and perimeter

Preparation, materials and activities



What you need

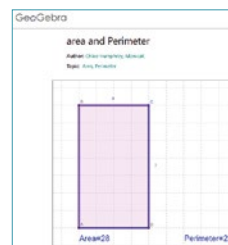
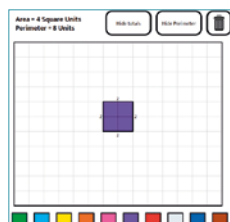
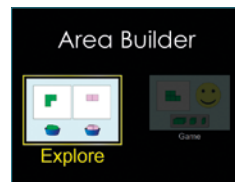
- Learner record
- Whiteboard and pen or paper and pencil

What you do

- Ask learner to estimate area and perimeter of simple 2D shapes
- Ask learner to calculate perimeter of shapes drawn
- Ask learner to calculate area of shapes drawn

Differentiation/additional resources

- [Area builder](#)
- [Calculate area and perimeter](#)
- [Area and perimeter explorer](#)
- Use Skills Workshop resources for culturally relevant materials e.g. calculating turf needed for garden or carpet needed for a room
- [Skills Workshop resource](#) – calculating carpet size and grass seed needed (optional)
- [Skills Workshop resource](#) – garden project (optional)



Key outcomes and benchmarks

I can use my knowledge of the sizes of familiar objects or places to assist me when making an estimate of measure. MNU 2-11a

- * Uses the comparative size of familiar objects to make reasonable estimations of length, mass, area and capacity.
- * Estimates to the nearest appropriate unit, then measures accurately: length, height and distance in millimetres (mm), centimetres (cm), metres (m) and kilometres (km); mass in grams (g) and kilograms (kg); and capacity in millilitres (ml) and litres (l).
- * Calculates the perimeter of simple straight sided 2D shapes in millimetres (mm), centimetres (cm) and metres (m).

I can explain how different methods can be used to find the perimeter and area of a simple 2D shape or volume of a simple 3D object. MNU 2-11c

- * Estimates to the nearest appropriate unit and measures accurately.
- * Calculates perimeter of square or rectangle.
- * Calculates area of square or rectangle.



e: step@ed.ac.uk
www.step.education.ed.ac.uk
X @mobileandlearn



Scottish Government
Riaghaltas na h-Alba
gov.scot