Numeracy in Expressive Arts

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Examples of contexts for learning across Expressive Arts to improve Numeracy skills.

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Introduction

Scotland's curriculum emphasises the importance of ensuring that learners engage in interdisciplinary learning, where they use skills across different areas of content and contexts. The teaching of numeracy is the responsibility for all. Expressive Arts offers an excellent opportunity to contextualise numeracy for children and young people. Across the range of Expressive Arts subjects there are many opportunities to enable learners to apply their numeracy skills, whilst enjoying the exciting learning opportunities which both of these contexts provide.

Numeracy and Maths Skills	Expressive Arts Skills
• Interpret questions • Select and communicate processes and solutions • Justify choice of strategy used • Link mathematical concepts • Use mathematical vocabulary and notation • Use mental agility • Reason algebraically • Determine the reasonableness of a solution	• Apply creative skills to produce and perform more complex pieces of work • Recognise creativity and skill in the work of other people • Demonstrate increasing skills and confidence in presentations and performances • Appreciation of how the expressive arts relate to the wider world and different cultures • Show enjoyment of the expressive arts, for example through evaluating constructively their own work and that of others, and suggesting how it can be improved.

This document offers examples of contexts across Expressive Arts where numeracy skills can be developed well and provides links to the Experiences and Outcomes and the Benchmarks. There are also some links to the Mathematics Experiences and Outcomes, as particular Expressive Arts skills can also align to Mathematics.

How to Use this Document

This document has been created to support practitioners to consider how to make links between numeracy and expressive arts skills. This includes examples of how to extend learner's numeracy skills through an expressive arts context. Supporting learners to apply their numeracy skills in different contexts can bring depth, breath and challenge in their understanding.

This document can be used in a variety of ways. The exemplars can be used to support practitioners to consider real and relevant contexts which could be used to develop learners' skills between numeracy and expressive arts. It can also be used to support interdisciplinary learning through planning of particular projects or school events. It could also be used to support discussions about the ways numeracy and expressive arts skills are taught and what the expectations are on learners working within each of the levels. It is important that practitioners highlight to learners the skills they are developing in both numeracy and expressive arts.

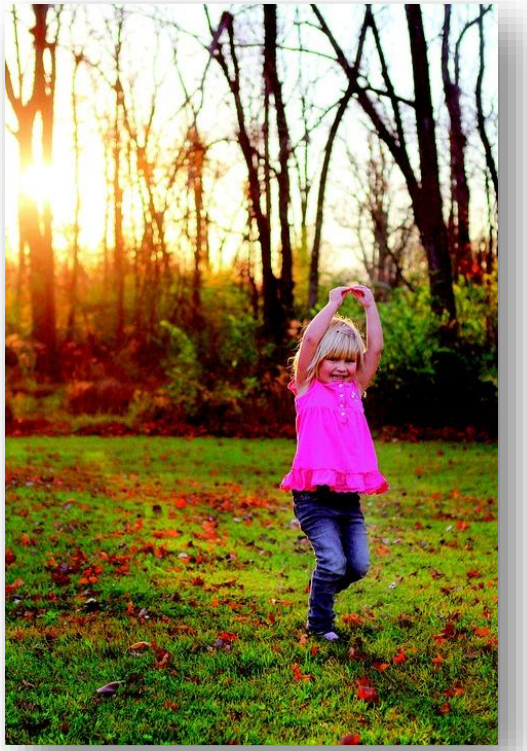
The examples included in this document should be used as suggestions and it is important to note that these may need to be adapted to make them suitable for the learners that you are working with. You might wish to include links to other Experiences and Outcomes which you are focusing on or take out certain elements which are not appropriate for your context. The examples do not need to be worked through in any order.

Where appropriate, we have included hyperlinks to resources which may support you in your planning. Several of these come from external sources which were correct at the time of publication.

Contexts for Learning – Early Level

Early Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Estimation MNU 0-01a Measurement MNU 0-11a	• Demonstrates **skills of estimation** in the contexts of number and measure using **relevant vocabulary**, including less than, longer than, more than and the same. • **Compares and describes** lengths, heights, mass and capacities **using everyday language**, including longer, shorter, taller, heavier, lighter, more and less.	When creating models and drawings mathematical language is modelled and used to describe and compare the designs and features. Vocabulary linked to estimation is modelled and used to create, compare and adapt designs.  **Education Scotland: Being me Through Block Play Wakelet**
Expressive Arts Art and Design EXA 0-02a EXA 0-06a	• Records from experiences across the curriculum, for example, through observing and remembering, **makes a model or drawing** based on an aspect of the natural environment such as natural items from the sea shore, the countryside, a forest. • **Solves simple design problems**, working on their own and with others, using a degree of **trial and error**, for example, designs a simple container for an agreed purpose.	

Early Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Data and Analysis MNU 0-20b Patterns and Relationships MTH 0-13a	• Uses knowledge of **colour**, **shape**, **size** and other properties to match and sort items in a variety of different ways. • Copies, continues and creates simple **patterns** involving **objects**, **shapes** and numbers.	When discussing different examples of art, mathematical language linked to pattern, size, colour and shape is modelled and used to describe what can be seen.  When exploring patterns in the world around them, learners are encouraged to use their knowledge of colour, shape and size to copy, continue and create their own designs. When working on simple design problems learners could be asked to use their knowledge of colour, shape and size to continue and create their own designs. **National Galleries of Scotland - The Beauty of Maths**
Expressive Arts Art and Design EXA 0-04a EXA 0-06a	• Recognises **colour**, line, **shape** and at least one more of the visual elements: form, tone, **pattern**, texture. • **Solves simple design problems**, working on their own and with others, using a degree of **trial and error**, for example, designs a simple container for an agreed purpose.	

Early Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Number and Number Processes MNU 0-02a MNU 0-03a	• Uses one-to-one correspondence to **count** a given number of objects to 20. • Uses **ordinal numbers in real life contexts**, for example, 'I am third in the line'. • Uses the **language** of before, after and in-between.	When creating and performing repeated movements and gestures, learners are encouraged to use mathematical language correctly, for example; *first* we jump, then *three* claps *before* we crouch *down*. Learners are encouraged to count the steps in simple, repeated sequences, keeping in time to the beat. 
Expressive Arts Dance EXA 0-08a EXA 0-10a	• Performs a range of simple, **repeated**, intentional **movements and gestures**. • Chooses and explores ways of **moving rhythmically**, expressively and playfully. • Shows understanding that dance consists of combined movements and gestures, usually performed with music or a **beat**.	

<table>
<tr><th>Early Level</th><th>Benchmarks</th><th>Possible Contexts for Learning</th></tr>
<tr><td rowspan="2">Maths and Numeracy

Number and Number Processes
MNU 0-02a
MNU 0-03a

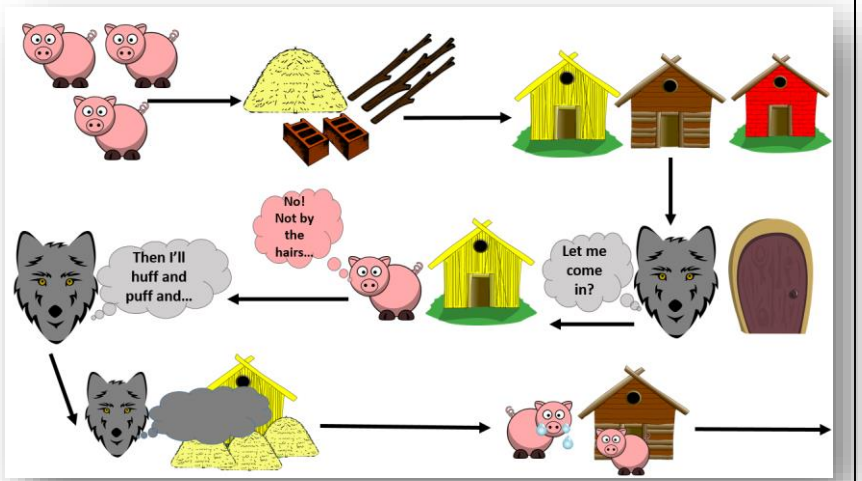
Time
MNU 0-10a</td><td>• Uses the language of before, after and in-between.

• Uses ordinal numbers in real life contexts, for example, ‘I am third in the line’.

• Links daily routines and personal events to time sequences.

• Uses appropriate language when discussing time, including before, after, o’clock, hour hand and minute hand.</td><td rowspan="2">Mathematical language linked to time and sequences is modelled and used when re-enacting stories or traditional tales in role. For example; First the three little pigs built their houses, after that the wolf come along. He knocks on the door of the second little pigs’ house…

This could be extended to include links to time sequences. For example; In the morning the little pigs went to get their building materials. After they had picked up their supplies they started to build their houses. At one o’clock they spotted the wolf prowling around outside…

 
</td></tr>
<tr><td>Expressive Arts

Drama
EXA 0-14a</td><td>• Takes on a role within a play or dramatised situation, for example, a puppet show, a real or imagined situation, re-enactment of a story or traditional tale.</td></tr>
</table>

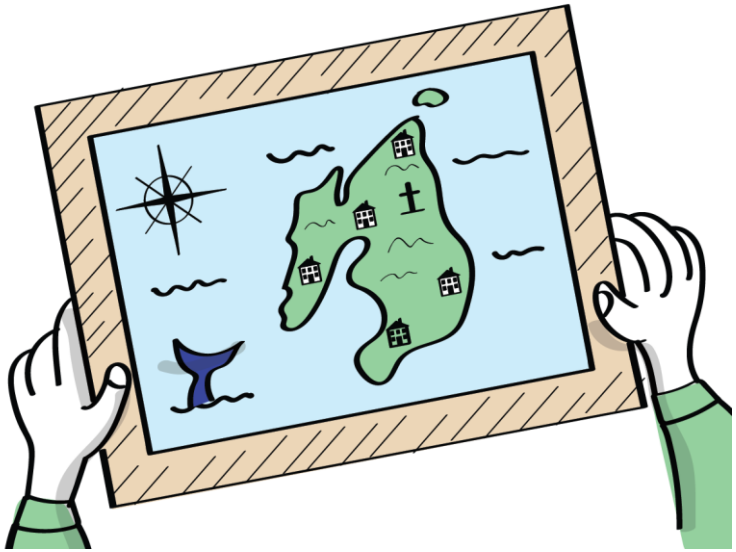
Early Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Number and Number Processes MNU 0-02a MNU 0-03a Patterns and Relationships MTH 0-13a	• When **counting objects**, understands that the number name of the last object counted is the name given to the **total number** of objects in the group. • Recalls the **number sequence** forwards within the range 0 - 30, from any given number • Uses one-to-one correspondence to **count** a given number of objects to 20. • **Copies, continues and creates simple patterns** involving **objects**, shapes and numbers.	When playing along on different musical instruments, learners are encouraged to count their beats, taps or claps, keeping in time to the beat. When exploring sounds learners are encouraged to copy, continue and create simple patterns. For example; clap, clap, stamp, clap, clap, stamp. **Maths Week Scotland 2022 - Ideas and Inspiration Pack** When listening to different music styles mathematical language linked to pattern, counting, order and speed can be modelled and used to describe what is heard. For example: "the keyboard is playing *fast";* "I hear *four* taps"; "the triangle plays *after* the drums"; ""it goes 1, 2, 1, 2"; "sounds like tick, tock, tick, tock" The Kitchen Sink (backing track) - BBC Teach A range of mathematical concepts such as counting, ordering, sequencing and using finger patterns and can be reinforced through taking part in songs and rhymes. Bookbug Song and Rhyme Library - Scottish Book Trust
Expressive Arts Music EXA 0-16a EXA 0-17a EXA 0-18a	• Uses instruments such as drum, claves, chime bar to **play along** to a range of music styles. • Shares views and listens appropriately to the views of others, for example, states if the music is **fast/slow** or loud/quiet. • uses voice to explore sound and **rhythm**, for example, hums, whispers, sings. • chooses different musical instruments to play such as chime bar, drum or body percussion, exploring sound and **rhythm** by, for example, clapping, tapping.	

Contexts for Learning – First Level

<table>
<tr><th>First Level</th><th>Benchmarks</th><th>Possible Contexts for Learning</th></tr>
<tr><td>Maths and Numeracy

Measurement
MNU 1-11a</td><td>• 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.</td><td rowspan="2">Learners could be given a design problem to plan and create a frame to display a piece of artwork. The design problem might ask learners to work to certain specifications to do with length and height. Learners should be encouraged to select and use measuring instruments accurately.

  </td></tr>
<tr><td>Expressive Arts

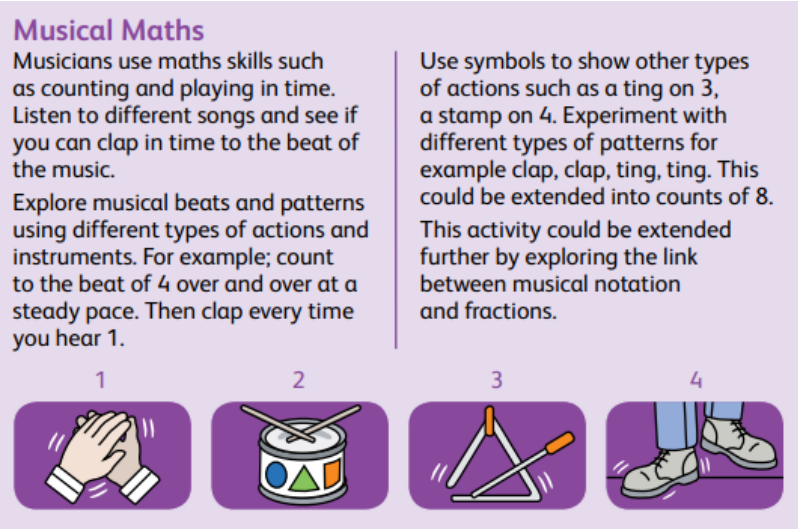
Art and Design
EXA 1-03a
EXA 1-06a</td><td>• Presents images and objects created, for example, positions a simple frame over a picture or arranges an object on a simple stand and observes from different angles.

• Solves at least one design problem related to real-life, showing some evidence of planning, for example, designs a simple item to be worn on the head or body.</td></tr>
</table>

First Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Patterns and Relationships MTH 1-13a Properties of 2D shapes and 3D objects MTH 1-16b Angel, Symmetry and Transformation MTH 1-19a	• **Continues and creates repeating patterns** involving shapes, pictures and symbols. • **Identifies symmetry** in patterns, pictures, nature and 2D shapes. • **Creates symmetrical pictures and designs** with more than one line of symmetry. • Identifies examples of tiling in the environment and applies knowledge of the features of 2D shapes to **create tiling patterns** incorporating two different shapes.	Learners could be given a design problem to plan, and create a piece of clothing for a particular purpose. The design problem might include specifications related to different mathematics concepts such as size, using a repeated pattern of shapes or colours or including an element of symmetry within their design. Mathematical vocabulary related to shape, colour, symmetry and pattern could be used when planning and describing designs. 
Expressive Arts Art and Design EXA 1-03a EXA 1-06a	• Solves at least one **design problem** related to real-life, showing some evidence of planning, for example, designs a simple item to be worn on the head or body. • Recognises and names most of the visual elements: line, **shape**, form, **colour**, tone, **pattern**, texture. • Shows understanding of the **concept of scale**, for example, represents mountains as bigger than people.	

First Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Time MNU 1-10c	• **Selects and uses the appropriate timers** for a specific purpose.	When creating a number of short improvisations, based on a well-known story, learners could be encouraged to select and use an appropriate timer to measure the duration of each drama. For example; two minutes to show what happened next in a traditional tale. Ten minutes to work together to change the ending of the story, with forty five seconds to present this piece to the class.
Expressive Arts Drama EXA 1-14a	• Creates a **short** drama using improvisation, from a **given stimulus** and working collaboratively.	

First Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Number and Number Processes MNU 1-02a Patterns and Relationships MTH 1-13a Angle, Symmetry and Transformation MTH 1-17a	• Reads, writes, orders and **recites whole numbers** to 1000, starting from any number in the sequence. • Continues and creates **repeating patterns** involving shapes, pictures and symbols. • Uses technology and other methods to **describe**, **follow** and record directions using words associated with **angles, directions and turns** including, full turn, half turn, quarter turn, clockwise, anticlockwise, right turn, left turn, right angle.	When exploring and creating different dance formations, encourage learners to keep track of the sequence of the movements and the rhythm of the music by counting in time to the beats. Mathematical vocabulary linked to directions, turns and repeated patterns could be used to describe the sequence. For example; **The Canadian Barn Dance Instructions** **Formation:** Standing in pairs around the room, each pair should be facing anti-clockwise, **Dance Steps;** • Walk forward for three steps and hop. • Walk backwards for three steps and hop. • Move sideways, 4 steps away from your partner and clap. • Back towards your partners for a count of 4 beats and join in ballroom hold. • Two steps to the left, 2 steps to the right. • Four step-hops to turn anti-clockwise, in a polka, around the room for 8 beats. Lesson Pack: Ceilidh Counts Simple Scottish dances | Royal Scottish Country Dance Society (rscds.org)
Expressive Arts Dance EXA 1-08a EXA 1-10a	• Creates, rehearses and performs short **dance sequences**, working on their own and with others. • Creates new dance movements and **sequences** using their dance repertoire, incorporating different **speeds** and levels, characters and emotions to add interest and variety. • Explores **rhythm**, movement and space, and increases possibilities for expression through movement. • Demonstrates understanding of **simple formations**, such as circles or squares, through taking in part in group dance.	

First Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Number and Number Processes MNU 1-02a Fractions, Decimal Fractions and Percentages MNU 1-07a MTH 1-07c Patterns and Relationships MTH 1-13a	• Reads, writes, orders and **recites whole numbers** to 1000, starting from any number in the sequence. • **Explains what a fraction is using** concrete materials, pictorial representations and **appropriate mathematical vocabulary**. • **Demonstrates understanding** that the greater the number of equal parts, the smaller the size of each share. • Uses known multiplication and division facts and other strategies **to find unit fractions of whole numbers**, for example, $\frac{1}{2}$ or $\frac{1}{4}$. • Continues and creates **repeating patterns** involving shapes, **pictures and symbols**.	When performing simple melodic parts and rhythms, learners are encouraged to keep track of the beats by counting in time. Learners can continue, copy and create repeated patterns within a rhythm.  **Musical Maths** Musicians use maths skills such as counting and playing in time. Listen to different songs and see if you can clap in time to the beat of the music. Explore musical beats and patterns using different types of actions and instruments. For example; count to the beat of 4 over and over at a steady pace. Then clap every time you hear 1. Use symbols to show other types of actions such as a ting on 3, a stamp on 4. Experiment with different types of patterns for example clap, clap, ting, ting. This could be extended into counts of 8. This activity could be extended further by exploring the link between musical notation and fractions. 1 2 3 4 From: Maths Week Scotland - First Level Activity Pack
Expressive Arts Music EXA 1-16a EXA 1-17a	• Performs a **simple rhythm** part on a range of instruments, for example, **keeps the beat** using body/untuned percussion. • Performs **simple melodic parts**, for example, on tuned percussion, tin whistle, recorder. • Follows **simple music notation**, for example, in the form of **pictures, graphics**, treble clef.	

This can be extended to explore how simple music notation is linked to fractions. For example; one semibreve is the same as two minims.

Note Name	Note Symbol	Note Value
Semibreve		4 beats
Minim		2 beats
Crotchet		1 beat
Quaver		$\frac{1}{2}$ of a beat

1	2	3	4
			
			
				

Contexts for Learning – Second Level

Second Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Measurement MNU 2-11a Properties of 2D shapes and 3D objects MTH 2-16c Angle, Symmetry and Transformation MTH 2-17d	• Uses the **comparative size of familiar objects** to make **reasonable estimations of length**, mass, area and capacity. • Uses digital technologies and mathematical instruments to **draw 2D shapes and make representations of 3D objects**, understanding that not all parts of the 3D object can be seen. • **Interprets** maps, **models** or plans **with simple scales,** for example, 1 cm:2 km.	When creating images, learners are encouraged to use their knowledge of the size of familiar objects to make accurate representations of shapes and objects. For example; drawing a street scene using perspective to add depth and realism. Learners could also use digital technologies to create their images or be asked to draw objects to scale.  Perspective in drawing and painting - 2nd level Art and Design - BBC Bitesize
Expressive Arts Art and Design EXA 2-03a	• Shows understanding of the **concept of depth**, for example, shows a foreground, a middle ground and a background in a picture.	

Second Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Money MNU 2-09a MNU 2-09c Time MNU 2-10a Data and Analysis MNU 2-20a MNU 2-20b	• **Compares costs and determines affordability** within a given budget. • **Carries out money calculations** involving the four operations. • **Calculates profit and loss accurately**, for example, when working with a budget for an enterprise activity. • **Uses** and interprets a range of electronic and paper-based timetables and **calendars to plan events or activities** and solve real life problems. • **Devises ways of collecting data** in the most suitable way for the given task. • **Analyses, interprets and draws conclusions** from a variety of data.	When investigating a design brief, such as designing a toy or new packaging, learners could gather views and opinions through a survey. They can be encouraged to think about what information they need to gather and the best way to collect this data. Once they have gathered their data and analysed the results they could use the information to inform the choices and decisions that they make with regards to their design brief. When creating a plan towards their final design, learners could be encouraged to use a timetable or calendar to work towards key points in their process. This could be extended to include working towards a set budget for their design, and learners could be asked to compare the cost of different materials and options to find the most cost effective design. If completing the design brief as part of an enterprise activity learners could be encouraged to track their profit and loss. Home - Make £5 Grow (make-5-grow.co.uk) https://yes.org.uk/programmes.php?id=5
Expressive Arts Art and Design EXA 2-06a	• **Creates a simple plan** that explains how they will investigate and develop ideas in response to a design brief. • **Follows a step-by-step process** to develop and communicate ideas in response to a design brief.	

Second Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Number and Number Processes MNU 1-02a Angle, Symmetry and Transformation MTH 1-17a	• **Counts forwards** and backwards in 2s, 5s, 10s, 100s. • Uses technology and other methods to describe, **follow** and record directions using **words associated with angles, directions and turns** including, full turn, half turn, quarter turn, clockwise, anticlockwise, right turn, left turn, right angle.	Mathematical language linked to counting, directions and turns should be explicitly used to follow and describe different dance sequences. Dances might be created, rehearsed and performed as part of festivals and celebrations. Learners could also perform traditional or popular dances.
Expressive Arts Dance EXA 2-08a EXA 2-10a	• Demonstrates **coordination** and some control in a range of **dance actions and sequences.** • **Creates, rehearses and performs** a short original dance piece, comprising **several sequences, to music or a rhythm**.	

Second Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Money MNU 2-09a MNU 2-09c Time MNU 2-10a Measurement MNU 2-11b	• **Compares costs and determines affordability** within a given budget. • **Carries out money calculations** involving the four operations. • **Calculates profit and loss accurately**, for example, when working with a budget for an enterprise activity. • **Uses** and interprets a range of electronic and paper-based timetables and **calendars to plan events or activities** and solve real life problems. • **Chooses the most appropriate measuring device** for a given task and carries out the required calculation, recording results in the correct unit. • **Reads** a variety of **scales accurately**.	When creating and presenting a [short] drama for an audience there are different elements of mathematics which could be linked into this process. This might include using a calendar or timetable to plan towards key deadlines such as the final production or dress rehearsal. Timers could also be used to establish the length of the performance and time needed for preparation and rehearsals. Learners might be asked to work with a set budget for elements such as costumes, staging or props. They could be encouraged to compare costs across different retailers and suppliers to establish affordability. For some performances and presentations learners might compare costs of different theatre arts services such as lighting, , staging and sound hire. If the drama is going to be ticketed learners could explore the concept of profit and loss, by working out ticket pricing, audience size and number of performances. Learners could create props, costumes, pieces of staging and set for the performance/presentation using their measuring skills. This could include selecting and using measuring devices accurately.
Expressive Arts Participation in Performance and Presentations EXA 2-01a Drama EXA 2-12a EXA 2-14a	• **Creates a short drama**, as part of a group or individually, using improvisation or a published script. • **Presents a short drama**, as part of a group, using improvisation or a script. • **Uses theatre arts technology** such as props, basic lighting and sound to **enhance a performance** effectively, for example, chooses appropriate music or makes sound effects to create atmosphere.	

<table>
<tr><th>Second Level</th><th>Benchmarks</th><th>Possible Contexts for Learning</th></tr>
<tr><td>Maths and Numeracy

Fractions, Decimal Fractions and Percentages
MNU 2-07a
MTH 2-07c</td><td>• Uses knowledge of equivalent forms of common fractions, decimal fractions and percentages, for example, $\frac{3}{4}$ = 0.75 = 75%, to solve problems.

• Creates equivalent fractions and uses this knowledge to put a set of most commonly used fractions in order.</td><td rowspan="2">When creating and performing different parts of songs and/or pieces of music, learners are encouraged to follow the musical notation. It is important that learners can keep in time with the beat and understand the connection between the beats and the fraction of time that they represent.

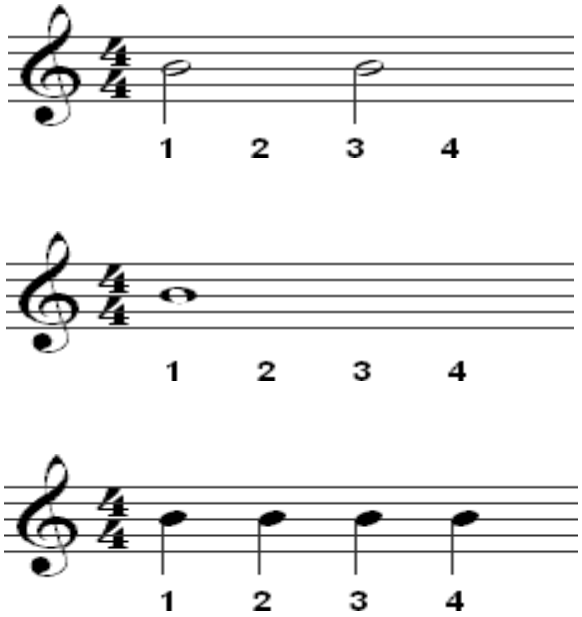
<table><tr><th>Note Name</th><th>Note Symbol</th><th>Note Value</th></tr><tr><td>Semibreve</td><td>  </td><td>4 beats</td></tr><tr><td>Minim</td><td>  </td><td>2 beats</td></tr><tr><td>Crotchet</td><td>  </td><td>1 beat</td></tr><tr><td>Quaver</td><td>  </td><td>$\frac{1}{2}$ of a beat</td></tr><tr><td>Semiquaver</td><td>  </td><td>$\frac{1}{4}$ of a beat</td></tr></table>
Lesson Pack: Science Ceilidh - Fractions Musical
Video: How are Maths and Creativity Connected?

When creating music, learners should identify which musical notes can be grouped together to create the correct duration of the bar. For example when working in</td></tr>
<tr><td>Expressive Arts

Music
EXA 2-16a
EXA 2-17a
EXA 2-18a</td><td>• Performs songs in unison and in parts, individually or as part of a group, and communicates the mood and character of songs from a range of styles and cultures, such as folk songs or songs from musicals, using appropriate performance directions, for example, gradually getting louder/quieter, and/or musical notation.

• Performs on instruments, individually or as part of a group, to communicate the mood and character of a piece of music through, for example, the use of appropriate dynamics and expression.

• Uses voice, instruments and technology to create music, experimenting with timbre, for example, uses tuned/untuned percussion instruments to create simple melodies and rhythms.</td></tr>
</table>

		four-four-time learners might use four crotchets or one semibreve or two minims to make a bar last the length of 4. This relies on learners having an understanding of fractions and their associated equivalence. 

Contexts for Learning – Third and Fourth Level

The examples included in this section should be used as suggestions and it is important to adapt these to make them suitable for the learners that you are working with.

Third / Fourth Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Money MNU 3-09a MNU 3-09b Time MNU 4-10a Data and Analysis MNU 3-20a MTH 3-20b MTH 3-21a	• **Chooses the best value** for their personal situation and **justifies choices**. • **Budgets effectively**, using digital technology where appropriate, showing development of financial capability. • Uses calculations to support c**omparisons, decisions and choices**. • Demonstrates **effective time management skills**, for example, working with different time zones or **making plans**, including across midnight. • Sources information or **collects data** making use of digital technology where appropriate. • **Interprets data** sourced or given. • Collects data by **choosing a representative sample** to avoid bias.	When creating a plan to work systematically through the design brief, learners should consider key points in the process and ensure that they plan enough time to complete these accordingly. When investigating a design brief, learners should consider how to gather views and opinions as part of their research. They can be encouraged to think about what information they need to gather, when they need to gather this, who should be asked and the best way to collect this data. This could be with regards to prototypes, options or samples of designs. As data is gathered and analysed the results should be used to evaluate and inform the choices and decisions that learners make with regards to their design brief. Learners could also be given a set budget to work with, encouraging them to compare the costs of different materials and resources and consider the quantity of materials that will be needed to create different samples and/or prototypes. Learners may also be given a target cost price, for example design a new board game which costs less than £5 to make. This encourages learners to consider the different types of materials and resources which could be used and justify their choices.
Expressive Arts Art and Design EXA 3-02a EXA 3-04a	• **Researches, develops and communicates a solution to a design brief by working through a process**. • Researches, develops and communicates	

EXA 3-06a EXA 4-03a EXA 4-06a	solutions to a design brief by working independently and systematically through a process. • Evaluates and makes informed judgements about what works well and what could be improved or different in their own and others' work, using appropriate art and design vocabulary consistently. • Selects independently and applies media and techniques, giving reasons for their choices.	

Third / Fourth Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Mathematics – its impact on the world, past, present and future MTH 4-12a	• Contributes to discussions and presentations on **the role of mathematics in everyday life and in the workplace**. • Investigates the **mathematical skills required for a range of careers**, including those in STEM subjects.	When evaluating and using different production arts such as lighting, props, staging and costume learners could be encouraged to consider the different mathematical skills used within these. This might include linking up with local industry partners to explore how maths is used in technical theatre careers. **Developing the Young Workforce Career Education Standards (3-18)** Career Education Standard (3-18) September 2015 **My World of Work** Subject choices (Creative Arts) | My World of Work Subject choices (Dance) | My World of Work **STEM Ambassadors** STEM Ambassadors | Scotland | STEM Ambassadors in Scotland
Expressive Arts Dance EXA 4-11a EXA 4-14b	• Evaluates technical aspects of their own and others' work, **including professionals**, for example, shows understanding of how stimulus is used as inspiration to create a movement repertoire, which can be repeated, varied or adapted. • Applies theatre arts technology effectively, demonstrating understanding of how performance can be enhanced by, for example, **lighting, costume, make-up and props**;	

Third / Fourth Level	Benchmarks	Possible Contexts for Learning
Maths and Numeracy Money MNU 3-09a MNU 3-09b Time MNU 4-10a Measurement MNU 3-11a MNU 4-11a Angle, Symmetry and Transformation MTH 3-17c	• Demonstrates **understanding of best value** in relation to contracts and services **when comparing products**. • **Budgets effectively**, using digital technology where appropriate, showing development of financial capability. • Uses calculations to support **comparisons**, **decisions** and **choices**. • Demonstrates **effective time management skills**, for example, working with different time zones or **making plans**, including across midnight. • **Chooses appropriate units** for length, area and volume **when solving practical problems**. • Uses bearings in a navigational context, including **creating scale drawings**.	When creating and presenting a drama for an audience there are different elements of mathematics which could be linked in to this. This may include creating a production timetable to incorporate key deadlines such as the rehearsal period, dress rehearsals and final performances. Learners could be asked to work with a set budget for elements such as costumes, staging or props. This would enable them to compare costs across different retailers and suppliers to justify best value. For some performances learners might compare costs of different theatre arts services such as lighting, staging and sound hire. If the performance is going to be ticketed learners could consider the best ways to ensure maximised profits, by calculating the predicted spend and considering ticket pricing, audience size and number of performances. Learners could create props, costumes, pieces of staging and set for the performance/presentation using their measuring skills. This could include measuring accurately in the appropriate units. A set design could also be created by the learners by measuring the size of the stage accurately and then re-creating this as a scaled drawing.
Expressive Arts Participation in Performance and Presentations EXA 3-01a EXA 4-01a	• **Presents dramas to audiences for different purposes**, for example, to entertain, inform, communicate a message, explore an issue. • **Creates dramas for different purposes and audiences**, experimenting with different genres, forms, structures and styles. • Reflects effectively on ideas, **including ideas**	

Drama EXA 3-14a EXA 4-13a EXA 4-14a EXA 4-14b	**for using production skills** in relation to, for example, lighting sound, props, make-up and hair, **in order to improve or enhance a dram**a, using appropriate drama vocabulary. • **Applies theatre arts technology and design resources effectively** to an agreed concept to create and enhance mood and atmosphere, for example, through the use of sound, lighting, costume, props, stage make-up and hair.	

Web Links

Expressive Arts Experiences and Outcomes
https://education.gov.scot/Documents/expressive-arts-eo.doc

Expressive Arts Benchmarks
https://education.gov.scot/nih/Documents/ExpressiveArtsBenchmarksWord.docx

Numeracy as a Responsibility for All
https://education.gov.scot/Documents/numeracy-across-learning-eo.doc

Numeracy and Mathematics Experiences and Outcomes
https://education.gov.scot/Documents/numeracy-maths-eo.doc

Numeracy and Mathematics Benchmarks
https://education.gov.scot/nih/Documents/NumeracyMathematicsBenchmarks.docx

Developing the Young Workforce Career Education Standard (3-18)
https://education.gov.scot/media/0nffvlwr/dyw2-career-education-standard-0915.pdf

With thanks to our partners for the external links:

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