



Numeracy in Religious & Moral Education

February 2024

Examples of contexts for learning across Religious and Moral Education 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. Religious & Moral Education (RME) offers an excellent opportunity to contextualise numeracy for children and young people. Across the range of the RME curriculum there are many opportunities to enable learners to apply their numeracy skills, whilst enjoying the exciting learning opportunities which both of these contexts provide.



Figure 1: From <https://scotlandscurriculum.scot/>

Numeracy and Maths Skills	RME Skills
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Explore and develop knowledge and understanding of religions, recognising the place of Christianity in the Scottish context • Investigate and understand the responses which religious and non-religious views can offer to questions about the nature and meaning of life • Recognise and understand religious diversity and the importance of religion in society • Develop respect for others and an understanding of beliefs and practices which are different from my own • Develop my beliefs, attitudes, values and practices through reflection, discovery and critical evaluation • Develop the skills of reflection, discernment, critical thinking and deciding how to act when making

This document offers examples of contexts across RME 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 RME 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 RME skills. This includes examples of how to extend learners' numeracy skills through an RME context. Supporting learners to apply their numeracy skills in different contexts can bring depth, breadth and challenge to 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 RME. It can also be used to support interdisciplinary learning through planning of particular projects or setting events. It could also be used to support discussions about the ways numeracy and RME 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 RME.

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 practitioners are working with. Practitioners might wish to include links to other Experiences and Outcomes which they are focusing on or take out certain elements which are not appropriate for their context. The examples do not need to be worked through in any order.

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

The inclusion of any hyperlink does not signify that Education Scotland endorses its content.

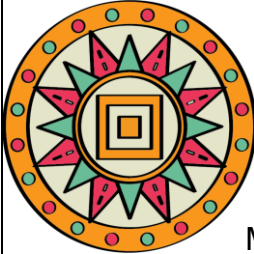
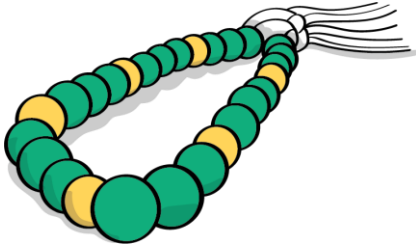
It is important when working through this material to be aware that:

- RME often deals with sensitive and personal issues
- There are likely to be a range of beliefs and values held in any setting around matters linked to RME, and that these beliefs and values are often strongly held
- Learners are likely to come from many belief groups and none, so it is important to consider language used, avoiding using terms such as 'we believe' and 'they believe'
- Learners should not be drawn upon to exemplify their religious beliefs and practices unless they indicate that they would like to share their experiences and the practitioner's professional judgment is that this is appropriate for the learner to do so. It is also worth remembering that the way customs and traditions are marked can vary between families
- If using any visiting speakers as part of the RME programme, then the content of any presentation they might make should be agreed beforehand to ensure they are representative of their belief group. Further guidance is available on the National Improvement Hub - [Using Visiting Speakers in RME](#)
- The majority of links between Numeracy and RME can be modelled through interactions with children at Early Level during play. Open ended experiences will allow the children opportunities to use this language around numeracy as part of their play
- While the possible contexts for learning within this document link to particular levels, there is potential for these to be used at different levels and differentiated to ensure they are linking to the relevant experience and outcomes.

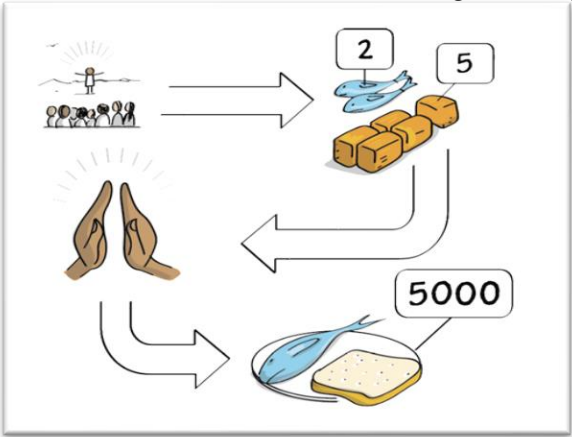
Contexts for Learning – Early Level

The majority of links between Numeracy and RME can be modelled through interactions with children at Early Level during play. Open ended experiences will allow the children opportunities to use this language around numeracy as part of their play.

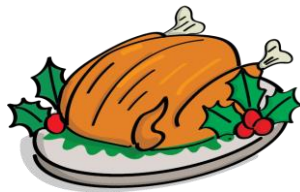

Early Level	Benchmarks	Possible Contexts for Learning
<p>Maths and Numeracy</p> <p>Fractions, decimal fractions and percentages</p> <p>I can share out a group of items by making smaller groups and can split a whole object into smaller parts. MNU 0-07a</p>	<ul style="list-style-type: none"> • Splits a whole into smaller parts and explains that equal parts are the same size. • Uses appropriate vocabulary to describe halves. • Shares out a group of items equally into smaller groups. 	<p>During play, mathematical language is modelled and used to explore what words such as fair, unfair and sharing means.</p> <p>For example, when sharing things out learners could be asked ‘I wonder who has more / less / the most?’ Interactions could build on by asking ‘I notice that I have 6 pieces and you have 3, is that fair?’ / ‘Sam seems to have lots more than you, I wonder how we could we make this fair?’ / ‘I wonder if we could share the blocks out equally?’</p>
<p>RME</p> <p>As I play and learn, I am developing my understanding of what is fair and unfair and the importance of caring for, sharing and cooperating with others. RME 0-02a</p>	<ul style="list-style-type: none"> • Shares thoughts about what is fair, unfair, caring and sharing. 	<p>When playing games, concepts such as turn-taking, fair play, everyone getting a fair share could be discussed and explored. This might include adding in rules which seem unfair, such as people wearing red can get an extra turn then discussing how learners felt when these rules were in place.</p> <p>This could also lead to some basic exploration around the concept of rules, when and why we need these and what might happen if we didn’t have any. These types of discussions can support learners’ understanding of responsibility and following rules for the benefit of others.</p> <p>Learners could also explore ways in which a variety of religions demonstrate caring and sharing in their practice such as the Langar kitchen in Sikhism, exploring the story of how the kitchen started and how it demonstrates caring and sharing in action.</p>

Early Level	Benchmarks	Possible Contexts for Learning
<p>Maths and Numeracy</p> <p>Data and Analysis I can match objects, and sort using my own and others' criteria, sharing my ideas with others. MNU 0-20b</p> <p>Patterns and Relationships I have spotted and explored patterns in my own and the wider environment and can copy and continue these and create my own patterns. MTH 0-13a</p>	<ul style="list-style-type: none"> • 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. 	 <p>Learners could be encouraged to match, sort and copy patterns within Mandalas, Rangoli patterns or Mendi designs. This could include creating their own patterns using a range of different materials such as using coloured sand to make their own Mandala. Mathematical vocabulary linked to the properties of the patterns such as the colour, size and shape can be modelled and used when discussing what has been created. For example; 'I notice it goes red, blue, red, blue – I wonder what colour would be next?' or 'I notice there is a big flower then a row of dots, what do you notice? what do you wonder?'</p>
<p>RME</p> <p>I am becoming aware of the importance of celebrations, festivals and customs in religious people's lives. RME 0-06a</p>	<ul style="list-style-type: none"> • Shares thoughts and asks and answers questions to show and support understanding about at least one celebration, festival and custom in Christianity and at least one World Religion. 	<p>Learners could also explore and discuss the different colours, shapes, sizes and patterns found within different religious artifacts such as the Tallith in Judaism, Rosary beads in Christianity and The Japa Mala (Garland of beads) in Hinduism.</p>  <p>When resourcing your spaces it is important to include a wide range of culturally diverse resources to ensure that you consider equality, diversity and inclusion within your setting.</p> <p>BBC Rangoli Patterns</p> <p>BBC Mendi patterns</p> <p>BBC Buddhist Monks create a Mandala</p> <p>BBC Holi</p>

Early Level	Benchmarks	Possible Contexts for Learning
<p style="text-align: center;">Maths and Numeracy</p> <p style="text-align: center;">Time</p> <p>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</p>	<ul style="list-style-type: none"> Links daily routines and personal events to time sequences. Names the days of the week in sequence, knows the months of the year and talks about features of the four seasons in relevant contexts. Recognises, talks about and where appropriate, engages with everyday devices used to measure or display time, including clocks, calendars, sand timers and visual timetables. 	<p>Learners could discuss the link between celebrations and certain months or seasons of year - for example, Pesach in Spring, and Christmas in December. This might include exploring days which are agreed in calendars (e.g. Christmas dates or The Festival of Makar Sankranti on 15th January) compared with dates which are more flexible (e.g. Eid or Holi).</p> <p>A calendar or visual timetable could be used to count down to or mark off celebrations and practices – such as Advent, Diwali, Lent or Ramadan. This could be used to support the understanding that a variety of different celebrations take place across the year.</p>
<p style="text-align: center;">RME</p> <p>I am becoming aware of the importance of celebrations, festivals and customs in Christian people’s lives. RME 0-03a</p> <p>I am becoming aware of the importance of celebrations, festivals and customs in religious people’s lives. RME 0-06a</p>	<ul style="list-style-type: none"> Shares thoughts and asks and answers questions to show and support understanding about at least one celebration, festival and custom in Christianity and at least one World Religion. 	<p>When discussing daily routines and personal events, learners could explore routines associated with different religions such as Prayer times in Hinduism and Islam, or special days in each religion (e.g. Sunday in Christianity, Jamaah prayers on Friday in Islam and Shabbat in Judaism).</p> <p>BBC Religion and Ethics Tools</p> <p>BBC Prayer times in Islam</p> <p>BBC Hindu Prayer at home</p> <p>BBC Jewish Festivals</p> <p>BBC Hindu Festivals</p> <p>BBC Buddhist Festivals</p> <p>BBC Sikh Festivals</p> <p>BBC Muslim Festivals</p>

Early Level	Benchmarks	Possible Contexts for Learning
<p style="text-align: center;">Maths and Numeracy</p> <p>Number and Number Processes I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. MNU 0-02a</p> <p style="text-align: center;">Time</p> <p>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</p>	<ul style="list-style-type: none"> • 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. 	<p>When retelling and re-enacting religious stories, mathematical language linked to time and sequences can be modelled and used. This helps to reinforce mathematical language in different contexts and make explicit the links across the curricular areas. For example, the story of the Good Samaritan; <i>First</i> the priest walks by the man who is in need, <i>after</i> that a <i>second</i> man, the Levite, walks by the man in need. The <i>third</i> man, the Samaritan, helps the man who is in need. Stories could also be retold through a storyboard:</p>  <p>This could be extended to include links to time sequences. For example, <i>In the morning</i> Sita spotted an injured deer. <i>After</i> Rama had gone off to find the deer Sita saw a thirsty man. <i>Two hours later</i> Rama noticed that Sita had disappeared... It took <i>many days and nights</i> for Hanuman to find Sita.</p> <p>BBC - Religions of the World</p> <p>Scottish Bible Society: Must Know Bible Stories</p> <p>Edinburgh University: Stories from World Religions</p>
<p style="text-align: center;">RME</p> <p>As I explore Christian stories, images, music and poems, I am becoming familiar with some beliefs Christian people have about God and Jesus. RME 0-01a</p> <p>As I explore stories, images, music and poems, I am becoming familiar with the beliefs of the world religions I am learning about. RME 0-04a</p>	<ul style="list-style-type: none"> • Shares thoughts and asks and answers questions to show and support understanding about stories, images, music and poems from Christianity and at least one World Religion. 	

Contexts for Learning – First Level

First Level	Benchmarks	Possible Contexts for Learning
<p style="text-align: center;">Maths and Numeracy</p> <p>Mathematics – its impact on the world, past, present and future I have discussed the important part that numbers play in the world and explored a variety of systems that have been used by civilisations throughout history to record numbers. MTH 1-12a</p> <p style="text-align: center;">Time I can use a calendar to plan and be organised for key events for myself and my class throughout the year. MNU 1-10b</p>	<ul style="list-style-type: none"> Investigates and shares understanding of the importance of numbers in learning, life and work. Investigates and shares understanding of a variety of number systems used throughout history. Uses and interprets a variety of calendars and 12 hour timetables to plan key event. Knows the number of seconds in a minute, minutes in an hour, hours in a day, days in each month, weeks and days in a year. Orders the months of the year and relates these to the appropriate seasons. 	<p>Learners could explore the similarities and differences between calendars used across world religions including Lunisolar, Solar and Lunar examples. This could include exploring the history around calendar dates, months and years. They could also explore why weeks differ in their start and ending days across some world religions.</p> <p>Learners could explore the dates of key celebrations and festivals, investigating which fall on set dates and which are flexible.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>When investigating the seasons, learners could also explore the northern hemisphere bias often presented in relation to many Christmas customs</p> </div> </div> <p>and celebrations – i.e. linked to winter, cold, dark etc. when a less stereotyped approach would recognise that Christmas is celebrated in the southern hemisphere too. This could also support further exploration around how celebrations and customs differ across the world, for example what is included in a traditional Christmas meal.</p> <div style="display: flex; align-items: center;">  </div> <p>The people who live in multiple timelines - BBC Future</p>
<p style="text-align: center;">RME</p> <p>I am developing an awareness of the ways in which Christians celebrate different times of year and can relate these to my own life and community. RME 1-03b</p> <p>I am developing an awareness of the ways in which followers of world religions celebrate different times of year and can relate these to my own life and community. RME 1-06b</p>	<ul style="list-style-type: none"> Describes and discusses the significance of at least one special ceremony, celebration and way of marking a major life event in Christianity, at least one World Religion, and at least one belief group independent of religion. 	

First Level	Benchmarks	Possible Contexts for Learning
<p align="center">Maths and Numeracy</p> <p align="center">Patterns and Relationships</p> <p>I can continue and devise more involved repeating patterns or designs, using a variety of media. MTH 1-13a</p> <p align="center">Properties of 2D shapes and 3D objects</p> <p>I can explore and discuss how and why different shapes fit together and create a tiling pattern with them. MTH 1-16b</p> <p align="center">Angle, Symmetry and Transformation</p> <p>I have explored symmetry in my own and the wider environment and can create and recognise symmetrical pictures, patterns and shapes. MTH 1-19a</p>	<ul style="list-style-type: none"> • 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. 	<p>Mathematical vocabulary related to shape, symbols, symmetry and pattern could be used when exploring and discussing the design of religious buildings and artefacts, for example religious buildings which are symmetrical or asymmetrical in design. This could lead to discussions around key design features of religious buildings, identifying those which are common across religions (somewhere where prayers might be led from – e.g. a pulpit, bimah, minbar) and those which are unique to religions (e.g. a windowless GarbhGriha in a Mandir, a minaret in a mosque or a bell-tower in a traditional Christian church). There might also be scope to discuss different cultural traditions within religions (for example, different designs of religious buildings across different cultures).</p>
<p align="center">RME</p> <p>By exploring some places and investigating artefacts, I am developing my knowledge of Christian beliefs and my awareness of the role of Christianity in Scottish society and the world. RME 1-01b</p> <p>By exploring some places and investigating artefacts, I am developing my knowledge of the beliefs of world religions and my awareness of their role in Scottish society and the world. RME 1-04b</p>	<ul style="list-style-type: none"> • Describes, discusses and expresses an opinion with at least one reason on at least one belief from Christianity, at least one World Religion, and at least one belief group independent of religion. 	<div data-bbox="1400 815 1756 1110" data-label="Image"> </div> <p>A range of religious artefacts could be used to explore tiling, symmetry and pattern. This might include religious mosaics, stained glass windows or Islamic calligraphic art. Learners could experiment with a range of materials when creating their own designs and discuss what mathematical features they have used in their creations. Mathematical vocabulary linked to symmetry, shape and pattern could be modelled</p> <div data-bbox="1778 1190 2123 1447" data-label="Image"> </div>

and used when exploring the meaning behind different styles of Christian cross such as Crucifix or Celtic Cross. There could be further exploration around why buildings / artifacts are the shape that they are and what this says about the followers' beliefs. Learners could also explore the Nishan Sahib (Sikh flag), it's shape and the symmetrical Khanda symbol it contains.







[BBC Temples and other religious buildings](#)

[BBC Sacred Spaces](#)

[BBC – Expressing the spiritual through music, art and literature](#)

[BBC the Cross](#)

First Level	Benchmarks	Possible Contexts for Learning
<p align="center">Maths and Numeracy</p> <p align="center">Data and Analysis</p> <p align="center">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</p>	<ul style="list-style-type: none"> Asks and answers questions to extract key information from a variety of data sets including charts, diagrams, bar graphs and tables. 	<p>Learners could begin to explore how data gathered and displayed in different ways might affect people's beliefs. For example, when trying to establish the setting's favourite ice-cream flavour is there a difference in the data collected when asking some classes; 'what is your favourite flavour of ice-cream' and asking others; 'Everyone in our class likes chocolate ice-cream the best, is this your favourite flavour?'</p>
<p align="center">RME</p> <p align="center">I am developing awareness that some people have beliefs and values which are independent of religion. RME 1-09a</p>	<ul style="list-style-type: none"> Describes and discusses at least one personal belief and at least one example of how own beliefs might affect actions. 	<p>Learners could also begin to consider how the wording or use of data can be used to influence our beliefs, such as the following claims:</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">  <p align="center">Number 1 FILM</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p align="center">Best-selling DRINK</p>  </div> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p align="center">RESTAURANT of the YEAR</p>  </div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">  <p align="center">Award Winning shampoo</p> </div> </div> <p>Learners could explore how their own beliefs are informed and influenced by data and consider how their actions are affected by these beliefs.</p> <p>This could lead onto discussions around how data might influence people's beliefs and actions and how these may be influenced by statements and claims made.</p>

First Level	Benchmarks	Possible Contexts for Learning
<p style="text-align: center;">Maths and Numeracy</p> <p style="text-align: center;">Mathematics – its impact on the world, past, present and future</p> <p>I have discussed the important part that numbers play in the world and explored a variety of systems that have been used by civilisations throughout history to record numbers. MTH 1-12a</p>	<ul style="list-style-type: none"> Investigates and shares understanding of a variety of number systems used throughout history. 	<p>Learners could explore the different historical measuring systems referred to in religious texts – for example, in the dimensions of cubits linked to the creation of the Ark of the Covenant, Noah’s Ark and Solomon’s Temple. This could lead onto further investigates around different number systems and how these have been used throughout history.</p> <p style="text-align: center;">BBC Noah’s Ark</p>
<p style="text-align: center;">RME</p> <p>By exploring some places and investigating artefacts, I am developing my knowledge of Christian beliefs and my awareness of the role of Christianity in Scottish society and the world. RME 1-01b</p> <p>By exploring some places and investigating artefacts, I am developing my knowledge of the beliefs of world religions and my awareness of their role in Scottish society and the world. RME 1-04b</p>	<ul style="list-style-type: none"> Describes, discusses and expresses an opinion with at least one reason on at least one belief from Christianity, at least one World Religion, and at least one belief group independent of religion. 	<p>Learners could also explore numbers which have special significance in different religions. For example, the number 9 in Hinduism, the number 7 in Judaism or the Noble Eightfold Path and the 5 skandhas in Buddhism. Learners could explore how these special numbers relate to customs, celebrations and traditions.</p> <p style="text-align: center;">Number 7 in Judaism: Why is Number 7 Special in Judaism?</p> <p style="text-align: center;">BBC: The Buddha and his teachings in Buddhism</p>

Contexts for Learning – Second Level

Second Level	Benchmarks	Possible Contexts for Learning
<p>Maths and Numeracy</p> <p>Fractions, decimal fractions and percentages</p> <p>I have investigated the everyday contexts in which simple fractions, percentages or decimal fractions are used and can carry out the necessary calculations to solve related problems. MNU 2-07a</p> <p>Money</p> <p>I can manage money, compare costs from different retailers, and determine what I can afford to buy. MNU 2-09a</p>	<ul style="list-style-type: none"> • Uses knowledge of equivalent forms of common fractions, decimal fractions and percentages, for example, $\frac{3}{4} = 0.75 = 75\%$, to solve problems. • Calculates simple percentages of a quantity and uses this knowledge to solve problems in everyday contexts, for example, calculates the sale price of an item with a discount of 15%. • Carries out money calculations involving the four operations. • Compares costs and determines affordability within a given budget. 	<p>Learners could explore and calculate different forms of charity donation across religions. For example, in many Christian groups, regular tithing (giving a portion of your income) is practised – generally on a voluntary basis. In Sikhism the practice of vand shako (donating a minimum of a tenth of their time, earnings, physical work [seva] to good causes) also features. Which groups practise this and what reasons are there for it? What rules are associated with it (for example, tithing as a response to a commandment in Christianity, compared with tithing because it reflects views of Jesus’ teaching) and how is the amount of tithing worked out? Learners could explore average salary amounts in different job roles and calculate how much would be donated based on different salaries.</p> <p>Learners could also begin to consider the relationship between monetary tithing and giving of time to support others – for example, the wider concept of Sewa (selfless service), in Sikhism supports the idea of giving a portion of your day in the service of others.</p>
<p>RME</p> <p>I am developing respect for others and my understanding of their beliefs and values. RME 2-07a</p>	<ul style="list-style-type: none"> • Investigates, describes, explains and expresses an opinion on at least one belief from Christianity, at least one World Religion, and at least one belief group independent of religion. • Discusses ways in which own beliefs can affect actions. 	<p>Learners could also explore the rules around Zakat (giving a portion of your income) in Islam and calculate what their own Zakat would be/is.</p> <p>Learners could then go on to explore different salary earnings and work out what a person/family would have left to budget with for bills and food after their donations</p>

have been made. This could lead to discussions about financial inequalities present in the local and global community and how these are addressed including within religious communities. For example, the fact that some families have low or no income meaning that they may receive charity rather than be expected to give it.



Learners could explore how religious groups might use some of their donations to support work within their community, for example through running food kitchens and clothing banks or offering their building as a warm space.

It is important to ensure that this topic is approached sensitively and using professional judgement.

[BBC Tithing](#)

[BBC Sikhism Sewa](#)

[Islamic Relief Zakat Calculator](#)

[Annual Survey of hours and earnings Scotland](#)

Second Level	Benchmarks	Possible Contexts for Learning
<p style="text-align: center;">Maths and Numeracy</p> <p style="text-align: center;">Data and Analysis</p> <p>Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading. MNU 2-20a</p>	<ul style="list-style-type: none"> • Analyses, interprets and draws conclusions from a variety of data. • Draws conclusions about the reliability of data taking into account, for example, the author, the audience, the scale and sample size used. 	<p>Learners could begin to understand that data can be presented in different ways which may give a varied picture of the place of religion and belief locally and globally. For example, how might the data support the view that a country was a ‘Christian’ country and what the implications of that might be. Learners could also look at data which shows the variety of belief within countries – for example, graphs or charts showing the different schools of Buddhism, Islam, Judaism etc. During the analysis of data – such as census data for religion, learners could explore what this means for Scotland and their own community. This could support learners to consider what might/might not be able to be described as a religion, as well as the spread and prevalence of religion and beliefs across their community/Scotland. Learners could also take a historical approach comparing census data over time to explore changing numbers identifying as religious/ non-religious. Learners could discuss how census data have sometimes been used to suggest that learning about religious beliefs is not as important as it once was while others would argue that understanding, celebrating and respecting diversity remains important regardless of any census data. Learners could also carry out surveys in their own setting and community around religion and beliefs and so make comparisons with national data and data they have gathered in their own context.</p> <p>Learners could also take a more global approach, using data around religion and beliefs globally to identify patterns of religion and beliefs around the world. This too, could take a historical approach, through exploring</p>
<p style="text-align: center;">RME</p> <p style="text-align: center;">Beliefs</p> <p>I am increasing my understanding of how people come to have their beliefs, and further developing my awareness that there is a diversity of belief in modern Scotland. RME 2-09a</p> <p>I am developing my understanding that people have beliefs and values based upon religious or other positions. RME 2-09b</p>	<ul style="list-style-type: none"> • Investigates, describes, explains and expresses an opinion on at least one belief from Christianity, at least one World Religion, and at least one belief group independent of religion. • Discusses ways in which own beliefs can affect actions. 	

		<p>contexts and places where religious belief has grown/reduced.</p> <p>Learners could also explore where data might be misleading or used to influence behaviour – such as data around environmental issues, food supply or the global economy. How might this affect decisions made around food choices, spending or economic activity?</p> <p><u>BBC Analysing data</u></p> <p><u>BBC Bias and Reliability</u></p> <p><u>Scottish Census Data - Religion</u></p> <p><u>Humanism UK Census data analysis</u></p> <p><u>Our World in Data</u></p>
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Second Level	Benchmarks	Possible Contexts for Learning
<p align="center">Maths and Numeracy</p> <p align="center">Data and Analysis</p> <p>Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading. MNU 2-20a</p>	<ul style="list-style-type: none"> • Analyses, interprets and draws conclusions from a variety of data. • Draws conclusions about the reliability of data taking into account, for example, the author, the audience, the scale and sample size used. 	<p>Using a range of data sources, learners can begin to explore the concept of misleading data and how this might affect our own beliefs and actions. This could include examples where the scale has truncated or where the sample size is very small.</p> <p>Discussions could go on to explore how data, headlines and adverts are used to affect and influence people. This might include trying to persuade the reader to buy different products or believe certain statements. Time could be spent exploring data displayed in different ways and considering how a change of layout, scale or labelling change the way we might interpret the data.</p>
<p align="center">RME</p> <p align="center">Beliefs</p> <p>I am increasing my understanding of how people come to have their beliefs, and further developing my awareness that there is a diversity of belief in modern Scotland. RME 2-09a</p> <p>I am developing my understanding that people have beliefs and values based upon religious or other positions. RME 2-09b</p>	<ul style="list-style-type: none"> • Discusses ways in which own beliefs can affect actions. 	<p>Learners could then be given a range of different news headlines or adverts to discuss, for example considering what emotions they might provoke and why or how they might make the reader feel. Then time could be spent examining what data has been used to reach the conclusion within the headline/advert, considering things such as; Has the data come from a reliable source? What was the sample size used? Who is the author? Where has it been published?</p> <p>Lea Gaslowitz: How to spot a misleading graph TED Talk</p> <p>How does fake news spread? - BBC Bitesize</p> <p>BBC Bias and Reliability</p>

Second Level	Benchmarks	Possible Contexts for Learning
<p>Maths and Numeracy</p> <p>Data and Analysis Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading. MNU 2-20a</p>	<ul style="list-style-type: none"> Analyses, interprets and draws conclusions from a variety of data. 	<p>Learners could use data sets from different parts of the world related to topics such as income, food, poverty and health care to discuss issues of fairness and equality. This could lead to discussions around the actions being taken to address some of these – for example through the work of religious and belief-based charities. They could explore the motivations behind these actions – for example Mosque kitchens, clothing and food banks, Bethany Care van/shelters, the work of the Salvation Army or Langar Kitchens in Sikhism etc.</p> <p>Gapminder</p>
<p>RME</p> <p>Values and Issues I can share my developing views about values such as fairness and equality and love, caring, sharing and human rights. RME 2-05b, RME 2-02b</p>	<ul style="list-style-type: none"> Discusses ways in which own values can affect actions. Discusses and expresses views about the importance of values such as honesty, respect and compassion. 	<p>Our World in Data</p> <p>U.K. Indicators For The Sustainable Development Goals (sdgdata.gov.uk)</p>

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
<p>Maths and Numeracy</p> <p>Data and Analysis</p> <p>I can work collaboratively, making appropriate use of technology, to source information presented in a range of ways, interpret what it conveys and discuss whether I believe the information to be robust, vague or misleading. MNU 3-20a</p> <p>I can evaluate and interpret raw and graphical data using a variety of methods, comment on relationships I observe within the data and communicate my findings to others. MNU 4-20a</p>	<ul style="list-style-type: none"> • Sources information or collects data making use of digital technology where appropriate. • Interprets data sourced or given. • Determines if information is robust, vague or misleading by considering, for example, the validity of the source, scale used, sample size, method of presentation and appropriateness of how the sample was selected. • Interprets raw and graphical data. • Uses statistical language, for example, correlations, to describe identified relationships. 	<p>Source and analyse data in relation to more complex moral issues and religious and belief responses to these. Consider if the data sourced is reliable – by exploring the source and sample size.</p> <p>Examples - Capital punishment, exploring the relationship between capital punishment and crime rates. How far does capital punishment act as a deterrent? e.g. what is the relationship between incidences of crime where capital punishment is present relative to where it is not? How do these figures link to beliefs about capital punishment across religions? Learners could also explore the relationship between the existence of capital punishment and the religious ‘make-up’ of a country.</p> <p>Climate change – sources and sinks. Exploring Government responsibilities around these. How are carbon footprints calculated? What is the true cost of different forms of energy production – e.g. nuclear power produces waste products which need to be stored for some considerable time – what is the cost of this and so is it an economically viable source of energy? Electric cars – designed to reduce fossil fuel use, but how is the energy for the electricity they use produced? Are fossil fuels still involved? Learners could also explore the costs of foods – for example organic v. non-organic – what costs are involved in their production and is organic produce an unaffordable option for some</p>
<p>RME</p> <p>Values and Issues</p> <p>Having reflected upon Christian responses to issues of morality, I can discuss ways in which to create a more just, equal, compassionate and tolerant society.</p>	<ul style="list-style-type: none"> • Investigates and analyses at least one moral issue, drawing upon sources to explain responses from Christianity, at least one World Religion, and at least one belief group independent of religion. • Expresses an opinion with 	

<p>RME 3-02a</p> <p>Through investigating and reflecting upon the responses of world religions to issues of morality, I can discuss ways in which to create a more just, equal, compassionate and tolerant society.</p> <p>RME 3-05a</p> <p>I can apply my developing understanding of morality to consider a range of moral dilemmas in order to find ways which could promote a more just and compassionate society.</p> <p>RME 4-02b, RME 4-05b</p>	<p>supporting reasons on the relationship between own values and actions.</p> <ul style="list-style-type: none"> • Evaluates how at least one moral viewpoint might be applied in relation to at least one moral issue. • Expresses a developed opinion with supporting reasons on the relationship between own values and actions. 	<p>people? Learners could compare these statistics and their implications with beliefs about environmental responsibility.</p> <p>Migration – calculating the economic cost of migration versus the human responsibility of caring for others. Where do migrants come from and go to? Why? What are the costs of migration for countries receiving migrants? How does this relate to the GDP of those countries in percentage terms? Can a ‘price’ be put on supporting people who want to improve their lives? How do these statistics link to religious beliefs about helping others?</p> <p>Other data which could be sourced, explored and analysed could be in relation to poverty, access to education or access to health services, life expectancy in Scotland or in different parts of the world.</p> <p>BBC Capital Punishment</p> <p>BBC Environment</p> <p>BBC Migration and refugees</p> <p>Our World in Data</p>
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Third / Fourth Level	Benchmarks	Possible Contexts for Learning
<p>Maths and Numeracy</p> <p>Mathematics – its impact on the world, past, present and future</p> <p>I have worked with others to research a famous mathematician and the work they are known for, or investigated a mathematical topic, and have prepared and delivered a short presentation. MTH 3-12a</p>	<ul style="list-style-type: none"> • Researches and communicates using appropriate mathematical vocabulary and notation, the work of a famous mathematician or a mathematical topic and explains the relevance and impact they have on society. 	<p>Learners could explore contemporary and historical figures and the extent to which they hold religious and non-religious explanations for a range of ultimate questions to be compatible.</p> <p>For example, figures who accept both scientific and religious explanations for a range of topics and those who think of them as mutually exclusive. Examples might include Darwin, Newton, Einstein, Kepler, Copernicus, Brahe, Napier, Pascal, Galileo or Pythagoras.</p> <p>Christianity and Mathematics - MacTutor History of Mathematics (st-andrews.ac.uk)</p> <p>29 Great Catholic Mathematicians You Should Know National Catholic Register (ncregister.com)</p> <p>Catholic Scientists and Mathematicians (thomism.org)</p> <p>BBC Islam and Mathematics</p> <p>Pew Research Centre data sets</p>
<p>RME</p> <p>Through reflection and discussion, I can explain a range of beliefs which people hold and can participate in debates about ‘ultimate questions’. RME 3-09a</p>	<ul style="list-style-type: none"> • Investigates and analyses at least one issue of belief, drawing upon sources to explain responses from Christianity, at least one World Religion, and at least one belief group independent of religion. 	<p>Learners could be asked to consider the impact that these figures had on maths/science and also its implication for and potential conflicts with religions and beliefs.</p>

Web Links

Religious & Moral Education Experiences and Outcomes

<https://education.gov.scot/media/hg0nltic/rme-eo.pdf>

Religious & Moral Education Benchmarks

<https://education.gov.scot/media/1z0ejtwp/rmebenchmarkspdf.pdf>

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>

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