# Mapping the Mathematics Online Interview to the Victorian Curriculum F-10: Mathematics

This table links tasks of each section from Mathematics Online Interview to the Victorian Curriculum F-10: Mathematics.

## Overview

The following table links tasks from the Mathematics Online Interview (MOI) to the Early Numeracy Research Project (ENRP) Growth Points (GPs), to the level, strand, code, content description, and elaboration of the *Victorian Curriculum F-10: Mathematics* where applicable.

The table is divided into the 8 sections of the MOI:

* [Section A: Counting](#_SECTION_A:_COUNTING)
* [Section B: Place Value](#_SECTION_B:_PLACE)
* [Section C: Addition and Subtraction](#_SECTION_C:_ADDITION)
* [Section D: Multiplication and Division](#_SECTION_D:_MULTIPLICATION)
* [Section E: Time](#_SECTION_E:_TIME)
* [Section F: Length Measurement](#_SECTION_F:_LENGTH)
* [Section G: Mass Measurement](#_SECTION_G:_MASS)
* [Section H: Properties of Shape](#_SECTION_H:_PROPERTIES)
* [Section I: Visualisation](#_SECTION_I:_VISUALISATION)
* [Foundation Detour](#_DETOUR_(for_students)

Interpreting the table:

* Blank cells indicate no obvious match from the task to the *Victorian Curriculum F-10: Mathematics*
* Tasks in the Foundation Detour to the *Victorian Curriculum F-10: Mathematics* but do not link to Growth Points.

Further details on the Victorian Curriculum F-10: Mathematics can be accessed from the VCAA website at: [http://victoriancurriculum.vcaa.vic.edu.au/mathematics/](http://victoriancurriculum.vcaa.vic.edu.au/mathematics/introduction/rationale-and-aims)

### SECTION A: COUNTING

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC Code | Content Description | Elaborations |
| 1 | Teddy Task | GP 2 |  |  |  |  |  |
| 1a | Teddy Task - Estimate a quantity |  |  |  |  |  |  |
| 1b | Teddy task - Counting task 1:1 correspondence |  | Level D | Number and Algebra | VCMNA052 | Use number names in sequence to count in everyday situations, initially from one to ten | Understanding one-to-one correspondence by knowing that each object is counted only once, by tracking an object while counting in shared and structured counting experiences, for example moving objects once counted, counting objects left to right |
| 1c | Teddy task - counting task (total) |  | Level F | Number and Algebra | VCMNA070 | Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond. | Understanding that each object must be counted only once, that the arrangement of objects does not affect how many there are, and that the last number counted answers the ‘how many’ questions |
| Level D | Number and Algebra | VCMNA052 | Use number names in sequence to count in everyday situations, initially from one to ten. | Understanding one-to-one correspondence by knowing that each object is counted only once, by tracking an object while counting in shared and structured counting experiences, for example moving objects once counted, counting objects left to right |
| 1d | Teddy task - 1 less |  | Level D | Number and Algebra | VCMNA056 | Model practical situations involving ‘adding to’ or ‘taking away’ with collections of up to five objects. | Counting on or back from a group using concrete materials, for example adding/ subtracting balls in a basket, pens in a container, tools in a toolbox |
| **2** | **Counting Forwards, Backwards and Breaking the Sequence** | | | | | | |
| 2a | Counting Forwards | GP 1 | Level F | Number and Algebra | VCMNA069 | Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point. | Identifying the number words in sequence, backwards and forwards, and reasoning with the number sequences, establishing the language on which subsequent counting experiences can be built |
| 2b | Counting Forwards, Breaking the Sequence | GP 3 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 2c | Counting Forwards, Breaking the Sequence | GP 3 |  |  |  |  |  |
| 2d | Counting Backwards | GP 3 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 2e | Counting Backwards | GP 3 | Level F | Number and Algebra | VCMNA069 | Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point. | Identifying the number words in sequence, backwards and forwards, and reasoning with the number sequences, establishing the language on which subsequent counting experiences can be built |
| **3** | **More or Less Tasks** | | | | | | |
| 3a | More | GP 3 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting  point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 3b | Less | GP 3 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| **4** | **Counting from 0 by 10's, 5s and 2s** | | | | | | |
| 4a | Counting by 10s | GP 4 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 4b | Counting by 5s | GP 4 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 4c | Counting by 2s | GP 4 | Level 1 | Number and Algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. | Developing fluency with forwards and backwards counting in meaningful contexts such as circle games |
| 4d | 5 more | GP 4 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences | Recognising patterns in number sequences, such as adding 10 always results in the same final digit |
| Developing fluency and confidence with numbers and calculations by saying number sequences |
| 4e | 10 less | GP 4 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences | Recognising patterns in number sequences, such as adding 10 always results in the same final digit. |
| Developing fluency and confidence with numbers and calculations by saying number sequences |
| **5** | **Counting from x by 10s and 5's** | | | | | | |
| 5a | Counting by 10s | GP 5 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, | Recognising patterns in number sequences, such as adding 10 always results in the same final digit. |
| Developing fluency and confidence with numbers and calculations by saying number sequences |
| 5b | Counting by 5s | GP 5 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences | Developing fluency and confidence with numbers and calculations by saying number sequences |
| Recognising patterns in number sequences, such as adding 10 always results in the same final digit. |
| **6** | **Counting from x by a single digit number** | | | | | | |
| 6a | Counting by 3s | GP 6 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences | Developing fluency and confidence with numbers and calculations by saying number sequences |
| 6b | Counting by 7s | GP 6 | Level 2 | Number and Algebra | VCMNA103 | Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences | Developing fluency and confidence with numbers and calculations by saying number sequences |
| **7** | **Counting money** | | | | | | |
| 7a | Counting money | GP 6 | Level 2 | Number and Algebra | VCMNA111 | Count and order small collections of Australian coins and notes according to their value |  |
| 7b | Counting money | GP 6 | Level 2 | Number and Algebra | VCMNA111 | Count and order small collections of Australian coins and notes according to their value |  |
| 7c | Count up to  $5 /change from $5 | GP 6 | Level 2 | Number and Algebra | VCMNA137 | Represent money values in multiple ways and count the change required for simple transactions to the nearest five  cents |  |

### SECTION B: PLACE VALUE

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| **8** | **Reading Numerals** | | | | | | |
| 8a | Reading numerals - 1 digit | GP 1 | Level 1 | Number and Algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line |  |
| 8b | Reading numerals - 2 digit | GP 2 | Level 1 | Number and Algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line |  |
| 8c | Reading numerals - 3 digit | GP 3 | Level 3 | Number and Algebra |  |  | Reproducing numbers in words using their numerical representations and vice versa (VCMNA130) |
| 8d | Reading numerals - 4 digit | GP 4 | Level 3 | Number and Algebra |  |  | Reproducing numbers in words using their numerical representations and vice versa (VCMNA130) |
| **9** | **Reading numerals** | | | | | | |
| 9a | Reading numerals - 1 digit |  | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line |  |
| 9b | Interpret 1-  digit quantities | GP 1 | Level F | Number and  algebra | VCMNA070 | Connect number names, numerals and  quantities, including zero, initially up to 10 and then beyond |  |
| 9c | Interpret 1- digit quantities/1 less | GP 1 | Level C | Number and algebra | VCMNA039 | Demonstrate in practical situations, ‘adding one more to’ and ‘taking one away from’ in everyday situations | Using shared experiences with concrete materials to add one more to or take away one from a group of objects, and count to find a total |
| Level D | Exploring the concept of adding one and taking away one (VCMNA056) |
| 9d | Subitising | GP 1 | Level F | Number and algebra | VCMNA071 | Subitise small collections of objects |  |
| **10** | **Calculator tasks** | | | | | | |
| 10a -A | Writing numerals - calculator - 1 digit | GP 1 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 10a-B | Writing numerals - calculator - 2 digit | GP 2 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 10a-C | Writing numerals - calculator - 3 digit | GP 3 | Level 2 | Number and algebra | VCMNA104 |  | Developing fluency with writing numbers in meaningful contexts |
| 10a-D | Writing numerals - calculator - 4 digit | GP 4 | Level 3 | Number and algebra | VCMNA130 | Recognise, model, represent and order numbers to at least 10 000 | Reproducing numbers in words using their numerical representations and vice versa |
| 10b | **Reading Numerals - Calculator** | | | | | | |
| 10b - Step 1 | Reading numerals - calculator - 1 digit | GP 1 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 10b-Step 2 | Reading numerals - calculator - 2 digit | GP 2 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 10b-Step 3 | Reading numerals - calculator - 3 digit | GP 3 | Level 2 | Number and algebra | VCMNA104 |  | Developing fluency with writing numbers in meaningful contexts |
| 10b-Step 4 | Reading numerals - calculator - 4 digit | GP 4 | Level 3 | Number and algebra | VCMNA130 | Recognise, model, represent and order numbers to at least 10 000 | Reproducing numbers in words using their numerical representations and vice versa |
| 10b-Step 5 | Reading numerals - calculator - 5 digit | GP 4 | Level 4 | Number and algebra | VCMNA152 | Recognise, represent and order numbers to at least tens of thousands | Reproducing five-digit numbers in words using their numerical representations, and vice  versa |
| **11** | **Ordering Task** | | | | | | |
| 11-A | Ordering - 1-digit set | GP 1 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 11-B | Ordering - 2-digit set | GP 2 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number |  |
| 11-C | Ordering - 3-digit set | GP 3 | Level 2 | Number and algebra | VCMNA104 | Recognise, model, represent and order numbers to at least 1000 |  |
| 11-D | Ordering - 4-digit set | GP 4 | Level 3 | Number and algebra | VCMNA130 | Recognise, model, represent and order numbers to at least 10 000 |  |
| **12** | **Bundling Tasks - Interpreting 2-digit numbers** | | | | | | |
| 12a | Interpreting 2-digit numbers | GP 2 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line | Modelling numbers with a range of material and images |
| VCMNA088 | Count collections to 100 by partitioning numbers using place value | Understanding partitioning of numbers and the importance of grouping in tens |
| 12b | 10 less | GP 2 | Level 1 | Number and algebra | VCMNA089 | Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts | Developing a range of mental strategies for addition and subtraction problems |
| **13** | **0** | GP 2 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line | Identifying numbers that are represented on a number line and placing numbers on a prepared number line |
| **14** | 3-digit number line- Interpreting 3-digit numbers | GP 3 |  | Number and algebra |  |  |  |
| **15** | 10 more- Interpreting 3-digit  numbers | GP 3 |  | Number and algebra |  |  |  |
| **16** | 10 less- Interpreting 3-digit  numbers | GP 3 |  | Number and algebra |  |  |  |
| **17** | 10 more- Interpreting 4-digit numbers | GP 4 | Level 3 | Number and algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| **18** | 10 more- Interpreting 4-digit numbers | GP 4 | Level 3 | Number and algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| **19** | **Sorting Capital Cities** | | | | | | |
| 19a | Read 6-digit numbers | GP5 | Level 5 | Number and algebra | VCMNA186 | Recognise, represent and order numbers to at least hundreds of thousands | Reproducing six-digit numbers in words using their numerical representations, and vice  versa |
| 19b | Read 6-digit numbers | GP5 | Level 5 | Number and algebra | VCMNA186 | Recognise, represent and order numbers to at least hundreds of thousands | Reproducing six-digit numbers in words using their numerical representations, and vice  versa |
| 19c | Read 7-digit numbers | GP5 |  | Number and algebra |  |  |  |
| 19d | Ordering 6-7  digit numbers | GP5 |  | Number and algebra |  |  |  |
| 19e | Place value explanation | GP5 |  | Number and algebra |  |  |  |
| **20** | **Interpreting the Number Line** | | | | | | |
| 20a | 0-100 | GP5 | Level 1 | Number and algebra | VCMNA087 | Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line | Identifying numbers that are represented on a number line and placing numbers on a prepared number line |
| 20b | 0-2000 | GP5 |  | Number and algebra |  |  |  |
| 20c | 39-172 | GP5 |  | Number and algebra |  |  |  |
| 20d | 0-1 000 000 | GP5 |  | Number and algebra |  |  |  |

### SECTION C: ADDITION AND SUBTRACTION

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| **21** | **Counting On** | | | | | | |
| 21a | Screened collection | GP 1 | Level 1 | Number and Algebra | VCMNA089 | Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts | Developing a range of mental strategies for addition and subtraction problems |
| 21b | Unscreened collections | GP 1 | Level F | Number and Algebra | VCMNA073 | Represent practical situations to model addition and subtraction | Using a range of practical strategies for adding and subtracting small groups of numbers, such as visual displays or concrete materials |
| **22** | **Counting back** |  |  |  |  |  |  |
| 22a | Mentally solves the subtraction problem | GP 3 | Level 1 | Number and Algebra | VCMNA089 | Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts | Developing a range of mental strategies for addition and subtraction problems |
| 22b | Needs fingers to solve the subtraction problem |  | Level F | Number and Algebra | VCMNA073 | Represent practical situations to model addition and subtraction | Using a range of practical strategies for adding and subtracting small groups of numbers, such as visual displays or concrete materials |
| **23** | Counting down to/Counting up from | GP 3. | Level 1 | Number and Algebra | VCMNA089 | Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts | Developing a range of mental strategies for addition and subtraction problems |
| **24** | **Basic Strategies** | | | | | | |
| 24a | Doubles/known fact | GP4 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 24b | Commutativity and count on 2 | GP4 | Level 1 | Number and Algebra | VCMNA089 | Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts | Developing a range of mental strategies for addition and subtraction problems |
| Level 2 | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 24c | Tens facts/Known fact | GP 4 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 24d | Add 10, Build  to next 10 | GP 4 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 24e | Known fact/fact family | GP 4 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 25 | **Derived Strategies** | | | | | | |
| 25a | Doubles/known fact | GP5 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 25b | Near Doubles/known fact | GP5 | Level 2 | Number and Algebra | VCMNA107 | Solve simple addition and subtraction problems using a range of efficient mental and written strategies | Becoming fluent with a range of mental strategies for addition and subtraction problems, such as commutativity for addition, building to 10, doubles, 10 facts  and adding 10 |
| 25c | Known fact/fact family | GP5 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Recognising that certain single- digit number combinations always result in the same answer for addition and subtraction, and using this knowledge for addition and subtraction of larger numbers |
| 25d | Build to next 10/Known fact | GP5 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Recognising that certain single- digit number combinations always result in the same answer for addition and subtraction, and using this knowledge for addition and subtraction of larger numbers |
| 25e | Add 10 take 1/ Build to next 10/ Known fact | GP5 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Recognising that certain single- digit number combinations always result in the same answer for addition and subtraction, and using this knowledge for addition and subtraction of larger numbers |
| **26** | **Multi-digit Strategies** | | | | | | |
| 26a | Addition | GP6 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Recognising that certain single- digit number combinations always result in the same answer for addition and subtraction, and using this knowledge for addition and subtraction of larger numbers |
| Extending strategies for addition and subtraction such as 14 + 8 + 6 = 14 + 6 + 8 = 28 and 54 – 28 = 2 + 20 + 4 |
| 26b | Addition | GP6 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Combining knowledge of addition and subtraction facts and partitioning to aid computation. For example, 57  + 19 = 57 + 20 – 1 |
| 26c | Subtraction | GP6 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Combining knowledge of addition and subtraction facts and partitioning to aid computation. For example, 57  + 19 = 57 + 20 – 1 |
| 26d | Half | GP6 |  |  |  |  |  |
| 26e | Double | GP6 | Level 3 | Number and Algebra | VCMNA133 | Recall addition facts for single- digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation | Extending strategies for addition and subtraction such as 14 + 8 + 6 = 14 + 6 + 8 = 28 and 54 – 28 = 2 + 20 + 4 |
| **27** | **How many Digits?** | | | | | | |
| 27a | Addition- More/Less than 1000 | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| Level 5 | VCMNA182 | Use estimation and rounding to check the reasonableness of answers to calculations | Applying mental strategies to estimate the result of calculations, such as estimating the cost of a supermarket trolley load |
| 27b | Subtraction- More/Less than 1000 | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| Level 5 | VCMNA182 | Use estimation and rounding to check the reasonableness of answers to calculations | Applying mental strategies to estimate the result of calculations, such as estimating the cost of a supermarket trolley load |
| **28** | **Estimating and Calculating Addition** | | | | | | |
| 28a | Estimate | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| 28b | Mental calculation | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| 28c | Written methods | GP6 | Level 5 | Number and Algebra | VCMNA185 | Use efficient mental and written strategies and apply appropriate digital technologies to solve problems | Choosing between mental, written and a technology-based computation depending on the nature of the problems and the purpose for computation |
| **29** | **Estimating and Calculating Subtraction** | | | | | | |
| 29a | Estimate | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| 29b | Mental calculation | GP6 | Level 3 | Number and Algebra | VCMNA131 | Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems | Justifying choices about partitioning and regrouping numbers in terms of their usefulness for particular calculations |
| 29c | Written methods | GP6 | Level 5 | Number and Algebra | VCMNA185 | Use efficient mental and written strategies and apply appropriate digital technologies to solve problems | Choosing between mental, written and a technology-based computation depending on the nature of the problems and the purpose for computation |

### SECTION D: MULTIPLICATION AND DIVISION

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| **30** | **Teddy Cars** | | | | | | |
| 30a | Modelling Multiplication | GP1 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 30b | Modelling Multiplication |  | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| **31** | **Teddies on the Mat** | | | | | | |
| 31a | Modelling Division | GP1 | Level 1 | Number and Algebra | VCMNA090 | Represent practical situations that model sharing | Sharing a set of objects, such as a packet of sweets, equally between a small group of people using one- to-one correspondence |
| 31b | Modelling Division |  | Level 2 | Number and Algebra | VCMNA109 | Recognise and represent division as grouping into equal sets and solve simple problems using these representations | Dividing the class or a collection of objects into equal-sized groups |
| **32** | **Unifix Train** |  |  |  |  |  |  |
| 32a | Partial modelling/Times as many | GP3 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 32b | Partial modelling/Times as many |  | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| **33** | **Tennis Balls Task** | | | | | | |
| 33a | Partial modelling/groups of multiplication | GP3 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 33b | Partial modelling/groups of multiplication |  | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| **34** | **Dots Array Task** | | | | | | |
| 34a | Partial modelling/Arrays | GP3 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 34b | Partial modelling/Arrays |  | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| **35** | Biscuits on a Tray (Abstracting Division -  Quotition) | GP4 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Representing array problems with available materials and explaining reasoning |
| **36** | **Number of Legs** | | | | | | |
| 36a | Abstracting Multiplication n | GP4 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 36b | Abstracting Multiplication n |  | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| **37** | At the Movies - Abstracting Division - Partition) | GP4 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Representing array problems with available materials and explaining reasoning |
| **38** | **Interpreting Multiplication** | | | | | | |
| 38a | Read the  question | GP5 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Representing array problems with available materials and explaining reasoning |
| 38b | Draw a representation | GP5 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Visualising a group of objects as a unit and using this to calculate the number of objects in several identical groups |
| 38c | Explain drawing | GP5 | Level 2 | Number and Algebra | VCMNA108 | Recognise and represent multiplication as repeated addition, groups and arrays | Representing array problems with available materials and explaining reasoning |
| **39** | **Multiplication Problems** | | | | | | |
| 39a | Basic, derived and intuitive strategies for multiplication | GP5 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 39b | Basic, derived and intuitive strategies for multiplication | GP5 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 39c | Basic, derived and intuitive strategies for multiplication | GP5 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 39d | Basic, derived and intuitive strategies for multiplication | GP5 | Level 4 | Number and Algebra | VCMNA155 | Recall multiplication facts up to 10 × 10 and related division facts | Extending multiplication facts (for example 4 by 7 is 28 so 4 by 7 tens is 28 tens) |
| 39e | Basic, derived and intuitive strategies for multiplication | GP5 | Level 4 | Number and Algebra | VCMNA155 | Recall multiplication facts up to 10 × 10 and related division facts | Extending multiplication facts (for example 4 by 7 is 28 so 4 by 7 tens is 28 tens) |
| 39f | Basic, derived and intuitive strategies for multiplication | GP5 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| **40** | **Cost of stickers** | | | | | | |
| 40a | Basic, derived and intuitive strategies for multiplication: Money | GP5 | Level 4 | Number and Algebra | VCMNA155 | Recall multiplication facts up  to 10 × 10 and related division facts | Extending multiplication facts (for example 4 by 7 is 28 so 4 by 7 tens is 28 tens) |
| 40b | Basic, derived and intuitive strategies for multiplication: Money |  | Level 3 | Number and Algebra | VCMNA135 | Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies |  |
| **41** | **Interpreting Division** | | | | | | |
| 41a | Read the question | GP6 | Level 2 | Number and Algebra |  |  |  |
| 41b | Draw a representation |  | Level 2 | Number and Algebra | VCMNA109 | Recognise and represent division as grouping into equal sets and solve simple problems using these representations | Dividing the class or a collection of objects into equal-sized groups |
| 41c | Explain drawing |  | Level 2 | Number and Algebra | VCMNA109 | Recognise and represent division as grouping into equal sets and solve simple problems using these representations | Dividing the class or a collection of objects into equal-sized groups |
| **42** | **Division Problems** | | | | | | |
| 42a | Basic, derived and intuitive strategies for division | GP6 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 42b | Basic, derived and intuitive strategies for division | GP6 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 42c | Basic, derived and intuitive strategies for division | GP6 | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| 42d | Basic, derived and intuitive strategies for division | GP6 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 42e | Basic, derived and intuitive strategies for division | GP6 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| 42f | Basic, derived and intuitive strategies for division | GP6 | Level 3 | Number and Algebra | VCMNA134 | Recall multiplication facts of two, three, five and ten and related division facts | Using strategies to recall the multiplication and related division facts for the twos, threes, fives and tens |
| **43** | **Washing Windows - Basic, derived and intuitive strategies for division** | | | | | | |
| 43a | Mental calculation | GP6 | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| 43b | Written methods |  | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| **44** | Off to the circus - Extending and applying division: remainders | GP7 |  | Number and Algebra |  |  |  |
| **45** | **Stamp Collection- Extending and applying division: remainders** | | | | | | |
| 45a | Mental calculation | GP7 | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| 45b | Written methods |  | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| **46** | **Rows of Trees in an Orchard - Extending and applying division: larger numbers** | | | | | | |
| 46a |  | GP7 | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |
| 46b |  |  | Level 4 | Number and Algebra | VCMNA156 | Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder | Using known facts and strategies, such as commutativity, doubling and halving for multiplication, and connecting division to multiplication when there is no remainder |

### SECTION E: TIME

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| 47 | **My clock** | GP1 | Level D | Measurement and Geometry | VCMMG062 |  | Understanding the purpose of a clock and some of its features |
| **48** | **Telling the time** | | | | | | |
| 48a | Telling the time | GP2 | Level 1 | Measurement and Geometry | VCMMG096 | Tell time to the half-hour | Reading time on analogue and digital clocks and observing the characteristics of half-hour times |
| 48b | Telling the time | GP2 | Level 1 | Measurement and Geometry | VCMMG096 | Tell time to the half-hour | Reading time on analogue and digital clocks and observing the characteristics of half-hour times |
| 48c | Telling the time | GP4 | Level 3 | Measurement and Geometry | VCMMG141 | Tell time to the minute and investigate the relationship between units of time | Recognising there are 60 minutes in an hour and 60 seconds in a minute |
| **49** | **The days and months** | | | | | | |
| 49a | The days and months | GP2 | Level D | Measurement and Geometry | VCMMG063 | Identify the days of the week in sequence | Communicating the days of the week |
| 49b | The days and months | GP2 | Level 2 | Measurement and Geometry | VCMMG118 | Name and order months and seasons |  |
| 49c/d | The days and months | GP3 | Level 2 | Measurement and Geometry | VCMMG118 | Name and order months and seasons |  |
| **50** | **Calendar tasks** | | | | | | |
| 50a | Calendar tasks | GP4 | Level 2 | Measurement and Geometry | VCMMG119 | Use a calendar to identify the date and determine the number of days in each month | Using calendars to locate specific information, such as finding a given date on a calendar and saying what day it is, and identifying personally or culturally specific days |
| 50b | Calendar tasks | GP4 | Level 2 | Measurement and Geometry | VCMMG119 | Use a calendar to identify the date and determine the number of days in each month | Using calendars to locate specific information, such as finding a given date on a calendar and saying what day it is, and identifying personally or culturally specific days |
| 50c | Calendar tasks | GP4 | Level 2 | Measurement and Geometry | VCMMG119 | Use a calendar to identify the date and determine the number of days in each month | Using calendars to locate specific information, such as finding a given date on a calendar and saying what day it is, and identifying personally or culturally specific days |
| 50d | Calendar tasks | GP4 | Level 2 | Measurement and Geometry | VCMMG119 | Use a calendar to identify the date and determine the number of days in each month | Using calendars to locate specific information, such as finding a given date on a calendar and saying what day it is, and identifying personally or culturally specific days |
| 50e | Calendar tasks | GP4 | Level 2 | Measurement and Geometry | VCMMG119 | Use a calendar to identify the date and determine the number of days in each month | Using calendars to locate specific information, such as finding a given date on a calendar and saying what day it is, and identifying personally or culturally specific days |
| **51** | **Duration Tasks** | | | | | | |
| 51a | Duration Tasks | GP5 | Level 4 | Measurement and Geometry | VCMMG168 | Use am and pm notation and solve simple time problems |  |
| 51b | Duration Tasks | GP5 | Level 5 | Measurement and Geometry | VCMMG197 | Compare 12- and 24-hour time systems and convert between them |  |
| 52 | TV guide | GP5 | Level 4 | Measurement and Geometry | VCMMG168 | Use am and pm notation and solve simple time problems |  |
| 53 | TV guide | GP5 |  |  |  |  |  |

### SECTION F: LENGTH MEASUREMENT

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
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| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| **54** | **The string and the stick** | | | | | | |
| 54a | The string and the stick | GP1 |  |  |  |  |  |
| 54b | The string and the stick | GP1 | Level F | Measurement and Geometry | VCMMG078 | Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language | Comparing objects directly, by placing one object against another to determine which is longer or by pouring from one container into the other to see which one holds more |
| 54c | The string and the stick | GP2 | Level F | Measurement and Geometry | VCMMG078 | Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language | Comparing objects directly, by placing one object against another to determine which is longer or by pouring from one container into the other to see which one holds more |
| **55** | **The straw and the paper clips** | | | | | | |
| 55a | The straw and the paper clips | GP3 | Level F | Measurement and Geometry | VCMMG078 | Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language | Comparing objects directly, by placing one object against another to determine which is longer or by pouring from one container into the other to see which one holds more |
| 55b | The straw and the paper clips | GP3 |  |  |  |  |  |
| **56** | **Using the ruler** |  |  |  |  |  |  |
| 56a | Using the ruler | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| 56b | Using the ruler | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| **57** | **Tearing the streamer** | | | | | | |
| 57a | Tearing the streamer | GP5 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| 57b | Tearing the streamer | GP5 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| 57c | Tearing the streamer | GP5 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |

### SECTION G: MASS MEASUREMENT

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
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| Item No. | Name of Item | GPs | Level | Strand | VC code | Content Description | Elaboration |
| **58** | **What do you notice?** | | | | | | |
| 58a | What do you notice? | GP1 | Level D | Measurement and Geometry | VCMMG061 | Respond to contexts involving ‘heavier/lighter’ than and ‘holds more/less’ than | Using measurement language such as longer and shorter, or heavier and lighter, to communicate differences between objects |
| 58b | What do you notice? | GP1 | Level D | Measurement and Geometry | VCMMG061 | Respond to contexts involving ‘heavier/lighter’ than and ‘holds more/less’ than | Using direct comparison to compare objects based on their length F3j, mass or volume |
| 58c | What do you notice? | GP2 | Level D | Measurement and Geometry | VCMMG061 | Respond to contexts involving  ‘heavier/lighter’ than and ‘holds more/less’ than | Using direct comparison to compare objects based on their length, mass or  volume |
| 58d | What do you notice? | GP2 | Level 1 | Measurement and Geometry | VCMMG095 |  | Lifting to compare the mass of objects using words, for example, heavier, lighter, same (VCMMG095) |
| 58e | What do you notice? | GP2 | Level 1 | Measurement and Geometry | VCMMG095 |  | Lifting to compare the mass of objects using words, for example, heavier, lighter, same (VCMMG095) |
| 58f | What do you notice? | GP2 | Level 1 | Measurement and Geometry | VCMMG095 |  | Lifting to compare the mass of objects using words, for example, heavier, lighter, same (VCMMG095) |
| 58g | What do you notice? | GP1 | Level F | Measurement and Geometry | VCMMG078 | Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language | Comparing objects directly, by placing one object against another to determine which is longer or by pouring from one container into the other to see which one holds more |
| **59** | **Teddies and coins** | | | | | | |
| 59a | Teddies and coins | GP3 |  |  |  |  |  |
| 59b | Teddies and coins | GP3 | Level 2 | Measurement and Geometry | VCMMG116 | Compare masses of objects using balance scales | Using balance scales to determine whether the mass of different objects is more, less or about the same |
| **60** | **One kilogram** |  |  |  |  |  |  |
| 60a | One kilogram | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| 60b | One kilogram | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| **61** | **Using standard units** | | | | | | |
| 61a | Using standard units | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| 61b | Using standard units | GP4 | Level 3 | Measurement and Geometry | VCMMG140 | Measure, order and compare objects using familiar metric units of length, area, mass and capacity | Recognising and using centimetres and metres, square centimetres, grams and kilograms, and millilitres and litres |
| **62** | **Using kitchen scales** | | | | | | |
| 62a | Using kitchen scales | GP5 | Level 4 | Measurement and Geometry | VCMMG165 | Use scaled instruments to measure and compare lengths, masses, capacities and temperatures | Reading and interpreting, to the nearest graduation, the graduated scales on a range of measuring  instruments |
| 62b | Using kitchen scales | GP5 | Level 4 | Measurement and Geometry | VCMMG165 | Use scaled instruments to measure and compare lengths, masses, capacities and temperatures | Reading and interpreting, to the nearest graduation, the graduated scales on a range of measuring  instruments |
| 62c | Using kitchen scales | GP5 | Level 4 | Measurement and Geometry | VCMMG165 | Use scaled instruments to measure and compare lengths, masses, capacities and temperatures | Reading and interpreting, to the nearest graduation, the graduated scales on a range of measuring  instruments |
| 62d | Using kitchen scales | GP5 |  |  |  |  |  |

### SECTION H: PROPERTIES OF SHAPE

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
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| Item No. | Name of Item | GPs | Level | Strand | VC Code | Content Description | Elaborations |
| **63** | **Sorting shapes** | | | | | | |
| 63a | Sorting shapes | GP1 | Level D | Measurement and Geometry | VCMMG064 | Use direct comparison to sort three dimensional objects and two-dimensional shapes | Sorting shapes that are the ‘same’ or ‘different’ |
| 63b | Sorting shapes | GP1 | Level 1 | Measurement and Geometry | VCMM098 | Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' |
| 63c | Sorting shapes | GP2 | Level D | Measurement and Geometry | VCMMG064 | Use direct comparison to sort three dimensional objects and two-dimensional shapes | Sorting shapes that are the ‘same’ or ‘different’ |
| **64** | **Choosing triangles** | | | | | | |
| 64a | Choosing triangles | GP3 | Level 1 | Measurement and Geometry | VCMM098 | Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' |
| 64b | Choosing triangles | GP3 | Level 1 | Measurement and Geometry | VCMM098 | Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' |
| 64c | Choosing triangles | GP4 | Level 1 | Measurement and Geometry | VCMM098 | Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' |

### SECTION I: VISUALISATION

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC Code | Content Description | Elaborations |
| **65** | **Shapes in the**  **environment** | GP1 | Level F | Measurement and Geometry | VCMM081 | Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment | Sorting and describing squares, circles, triangles, rectangles, spheres and cubes |
| **66** | **Peeking over** | | | | | | |
| 66a | Peeking over | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Identifying key features of squares, rectangles, triangles, kites, rhombuses and circles, such as straight lines or curved lines, and counting the edges and corners |
| 66b | Peeking over | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Identifying key features of squares, rectangles, triangles, kites, rhombuses and circles, such as straight lines or curved lines, and counting the edges and corners |
| 66c | Peeking over | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Identifying key features of squares, rectangles, triangles, kites, rhombuses and circles, such as straight lines or curved lines, and counting the edges and corners |
| **67** | **Triads** | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' (VCMMG098) |
| **68** | **Triads** | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' (VCMMG098) |
| **69** | **Triads** | GP2 | Level 2 | Measurement and Geometry | VCMMG120 | Describe and draw two- dimensional shapes, with and without digital technologies | Focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces' (VCMMG098) |
| **70** | **Puzzle** | GP3 | Level 4 | Measurement and Geometry | VCMMG170 | Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies | Identifying common two- dimensional shapes that are part of a composite shape by re-creating it from these shapes |
| **71** | **Design** | GP4 | Level 5 | Measurement and Geometry | VCMMG200 | Describe translations, reflections and rotations of two- dimensional shapes. Identify line and rotational symmetries. | Identifying the effects of transformations by manually flipping, sliding and turning two- dimensional shapes and by using  digital technologies. |
| **72** | **Rearrange**  **the square** | GP4 | Level 4 | Measurement and Geometry | VCMMG170 | Compare and describe two  dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies |  |

### FOUNDATION DETOUR (for students in the first year of school)

| MATHEMATICS ONLINE INTERVIEW | | | VICTORIAN CURRICLUM F-10: MATHEMATICS | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item No. | Name of Item | GPs | Level | Strand | VC Code | Content Description | Elaborations |
| **F1** | **Quantity tasks/More or less/Conservation** | | | | | | |
| F1a |  | NA | Level C | Number and Algebra | VCMNA042 | Pair identical objects from a small collection, and recognise simple repeated patterns | Using a single given attribute (for example, size, colour, texture, shape) to group objects |
| F1b | Quantity task | NA | Level D | Number and Algebra | VCMNA053 | Recognise number name, numerals and quantities, initially up to five and beyond | Responding to key vocabulary and questions about ‘how many’ |
| F1c | More or less | NA | Level D | Number and Algebra | VCMNA055 | Compare, order and make comparisons between two collections, according to their quantity, using numbers initially to five | Comparing and ordering collections using the appropriate language and number name |
| F1d | Quantity task | NA | Level D | Number and Algebra | VCMNA052 | Use number names in sequence to count in everyday situations, initially from one to ten | Understanding one-to-one correspondence by knowing that each object is counted only once, by tracking an object while counting in shared and structured counting experiences, for example moving objects once counted, counting objects left to right |
| F1e i | Quantity task/ Conservation | NA | Level D | Number and Algebra |  |  | Responding to key vocabulary and questions about ‘how many’ (VCMNA053) |
| F1e ii | Quantity task/ Conservation | NA | Level D | Number and Algebra |  |  | Responding to key vocabulary and questions about ‘how many’ (VCMNA053) |
| F1f | Quantity task/ Conservation | NA |  |  |  |  |  |
| F1g | Quantity task/ Conservation | NA | Level D | Number and Algebra | VCMNA056 | Model practical situations  involving ‘adding to’ or ‘taking away’ with  collections of up to five objects | Using shared experiences with concrete materials to combine two groups of objects, and count to find a total |
| **F2** | **Location/pat tern/ordinal number** | | | | | | |
| F2a | Location | NA | Foundation | Number and Algebra | VCMNA077 | Follow a short sequence of instructions | Carrying out a specified sequence of actions to move an object from one location to another |
| Number and Algebra | VCMMG082 | Describe position and movement | Interpreting the everyday language of location and direction, such as ‘between’, ‘near’, ‘next to’, ‘forwards’, ‘towards’ |
| F2b | Pattern | NA | Foundation | Number and Algebra | VCMNA076 | Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings |  |
| F2c | Pattern | NA | Foundation | Number and Algebra | VCMNA076 | Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings |  |
| F2d | Pattern | NA | Foundation | Number and Algebra | VCMNA076 | Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings | Extending patterns using materials and drawings to the right and to the left |
| F2e | Pattern | NA | Foundation | Number and Algebra | VCMNA076 | Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create  patterns with objects and | Creating and describing patterns using materials, sounds, movements or drawings |
| Identifying which part of the pattern is being repeated (happening over and over again) |
| F2f | Ordinal number | NA |  |  |  |  | Understanding and using terms such as ‘first’ and ‘second’ to indicate ordinal position in a sequence  (VCMNA072) |
| **F3** | **Subitising/Matching Numerals to quantities/Ordering/One to one correspondence/Part- part-whole** | | | | | | |
| F3a | Subitising | NA | Foundation | Number and Algebra | VCMNAO71 | Subitise small collections of objects |  |
| F3b | Matching Numerals to quantities | NA | Level D | Number and Algebra | VCMNA053 | Recognise number name, numerals and quantities, initially up to five and beyond | Matching numerals to the correct number of items initially to five using number games, software, cards and everyday situations |
| Foundation | Number and Algebra | VCMNA070 | Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond |
| F3c | Ordering | NA |  |  |  |  |  |
| F3d | Ordering | NA |  |  |  |  |  |
| F3e | Ordering | NA |  |  |  |  |  |
| F3f | Part-part- whole | NA |  |  |  |  |  |
| F3g i | 1 more | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3g ii | 1 more | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3g iii | 1 more | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3h i | 1 less | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3h ii | 1 less | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3h iii | 1 less | NA | Level 1 | Number and algebra | VCMNA086 | Develop confidence with number sequences to and from 100 by ones from any starting point. |  |
| F3i | One to one correspondence | NA | Level C | Number and algebra | VCMNA040 | Sharing materials in practical situations | Using one to one correspondence to distribute materials evenly |
| Level D | VCMNA057 | Sharing material in practical situations so everyone has the same amount | Sharing material in practical situations so everyone has the same amount |
| F3j | Ordering | NA | Level D | Measurement and  geometry |  |  | Using direct comparison to compare objects based on their length, mass or volume (VCMM061) |
| F3k | Ordering | NA |  |  |  |  |  |

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