



# MATH Kits for Alberta Grade 2 New Math Curriculum

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# CONTENTS OF THIS SLIDE DECK

This slide deck is designed to provide suggested math manipulatives that may help support the new Grade 2 Math Curriculum. It is not exhaustive nor is it required. It is designed to support ideas in developing your own version of a student kit! Explanations are provided in the recording.

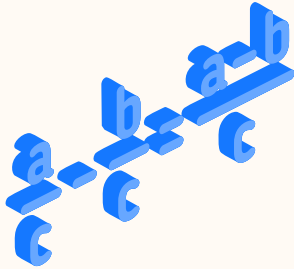
Enjoy Grade 2!



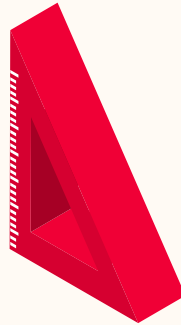
# INTRODUCTION

## Math Kit Grade 2

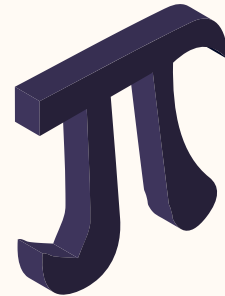
Contents  
Overview



Taking a Closer  
Look



Suggested sites  
for purchase



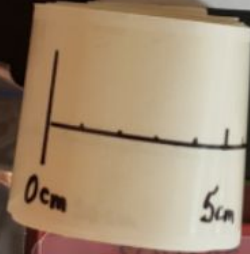


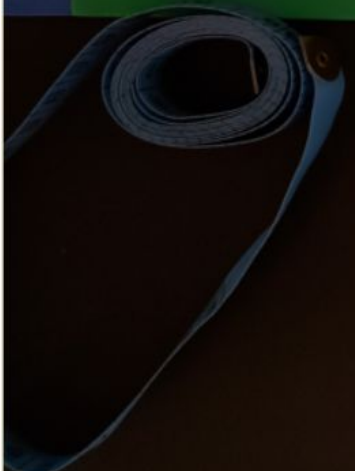
11-4

$$\begin{array}{r} 12 \\ - 9 \\ \hline \end{array}$$

3+

$$\begin{array}{r} 12 \\ + 10 \\ \hline \end{array}$$



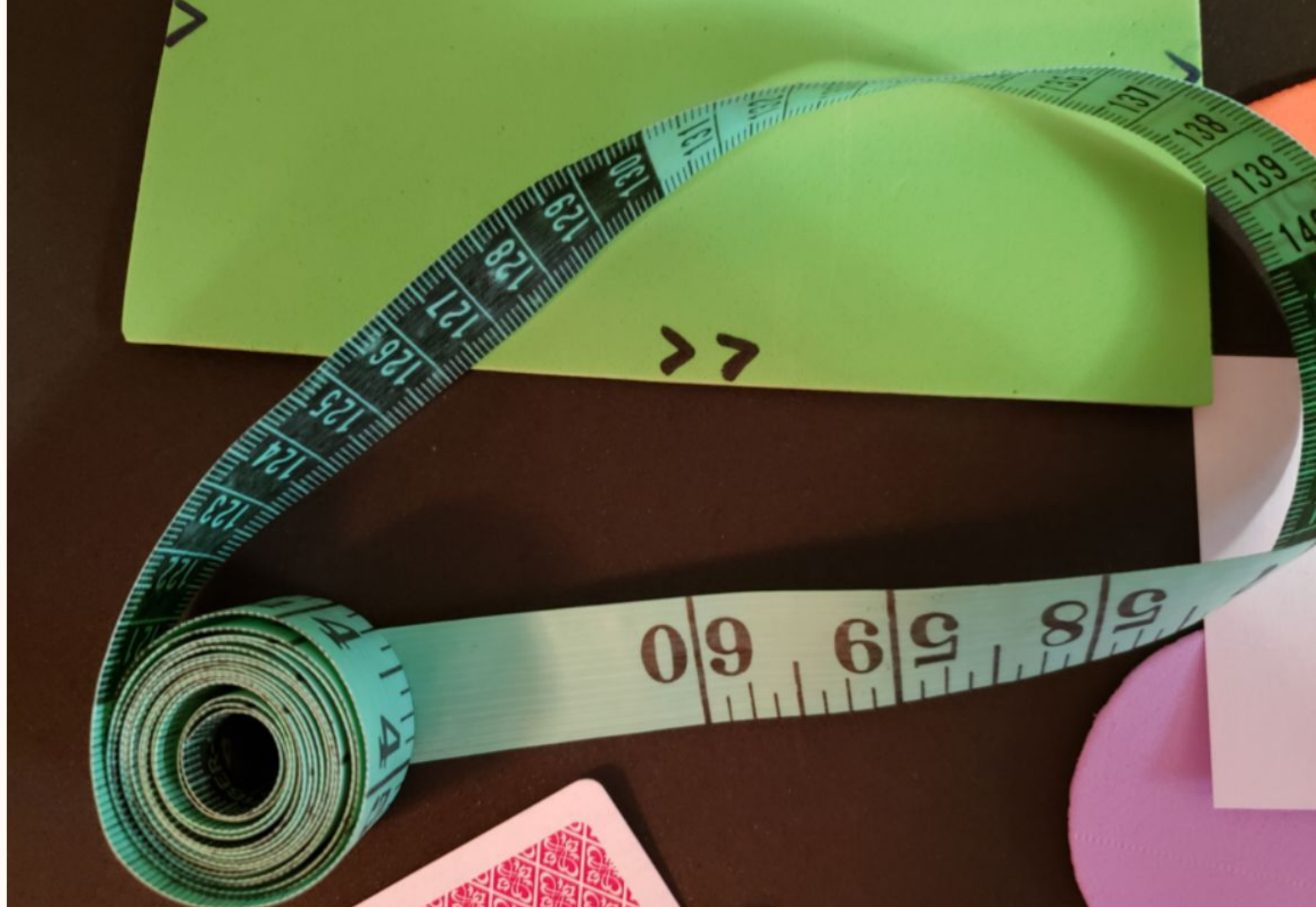


☆ 120 chart ☆

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
| 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  |
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| 60  | 61  | 62  | 63  | 64  | 65  | 66  | 67  | 68  | 69  |
| 70  | 71  | 72  | 73  | 74  | 75  | 76  | 77  | 78  | 79  |
| 80  | 81  | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  |
| 90  | 91  | 92  | 93  | 94  | 95  | 96  | 97  | 98  | 99  |
| 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 |
| 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 |

Composing and Decomposing Numbers

|  |  |
|--|--|
|  |  |
|  |  |



# Suggested amounts of Money for each Ziplock Bag



10 pennies

6 nickels

10 dimes

6 quarters

4 loonies

3 toonies

2 x \$5.00

2 x \$10.00

2 x \$20.00

2 x \$50.00

1 x \$100.00

Additional cash, if needed, can be retrieved from the “Bank”



### Subitizing Cards

A copy of the card deck is available along with the other downloads.





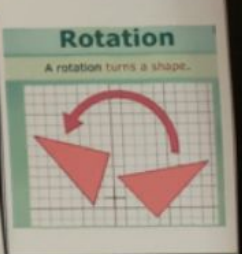
=



ODD

EVEN

|     |     |     |     |     |     |     |     |     |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910  |
| 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920  |
| 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930  |
| 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940  |
| 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950  |
| 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960  |
| 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970  |
| 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980  |
| 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990  |
| 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 |



EQUAL

UNEQUAL

≠



>

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 |
| 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 |
| 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 |
| 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 |
| 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 |
| 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 |
| 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 |
| 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 |
| 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 |
| 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 |



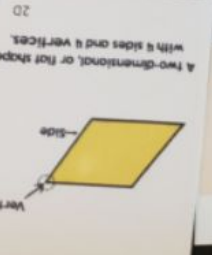
LESS Than

GREATER Than

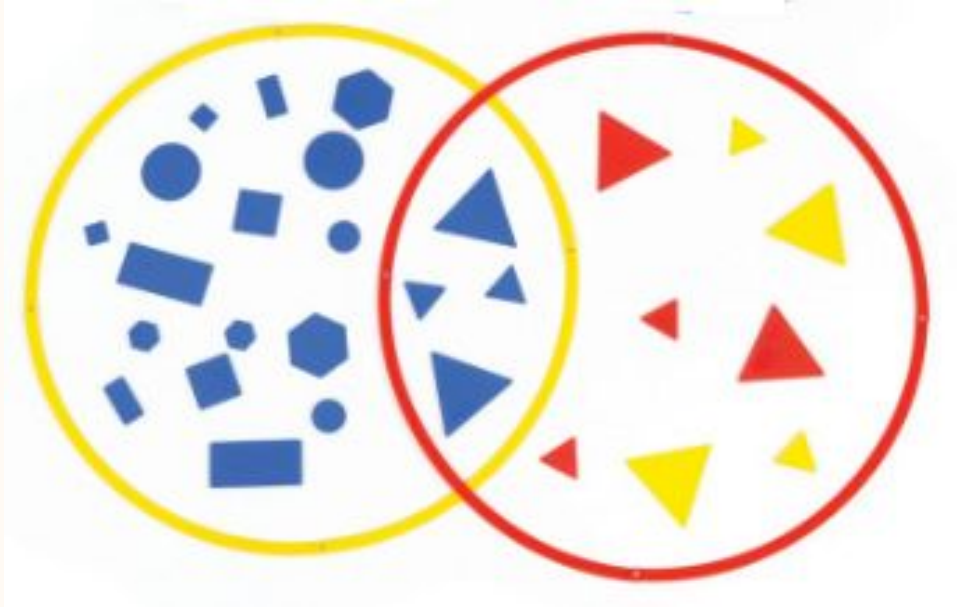
SHORTER

LONGER

<



# Hula Hoops for Venn Diagrams



Money less than 80 cents  
vs money greater than 25  
cents and divisible by 5



## Terminology Reference Card

### Addition

altogether  
in all  
Sum  
total

### Subtraction

How many \_\_\_ left?  
difference  
from  
remain or remaining

Words used to **compare** such as:

How much greater is \_\_\_ than \_\_\_?

How many fewer is \_\_\_ than \_\_\_?

How much taller/heavier is \_\_\_ than \_\_\_?

How much shorter is \_\_\_ than \_\_\_?

Action words such as:

gave sold used cut

### Multiplication

product  
altogether  
each  
in all  
\_\_\_ groups of \_\_\_  
times  
\_\_\_ of \_\_\_

### Division

Quotient  
Divide  
Share  
Share in groups of \_\_\_



### Addition

altogether  
in all  
Sum  
total

### Subtraction

How many \_\_\_ left?  
difference  
from  
remain or remaining

Words used to **compare** such as:

How much greater is \_\_\_ than \_\_\_?

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How much shorter is \_\_\_ than \_\_\_?

Action words such as:

gave sold used cut

### Multiplication

product  
altogether  
each  
in all  
\_\_\_ groups of \_\_\_  
times  
\_\_\_ of \_\_\_

### Division

Quotient  
Divide  
Share  
Share in groups of \_\_\_



Terminology Card can be accessed through the link at the end of the presentation..



Staples





☆ 120 chart ☆

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
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| 80  | 81  | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  |
| 90  | 91  | 92  | 93  | 94  | 95  | 96  | 97  | 98  | 99  |
| 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 |
| 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 |

120

Generic

Composing and Decomposing Numbers

|  |  |
|--|--|
|  |  |
|  |  |

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |



Dollar Tree



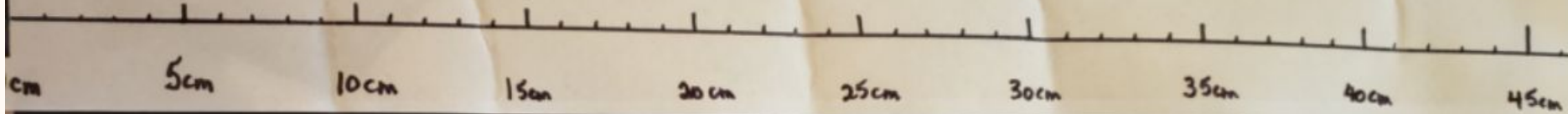


Dollarama



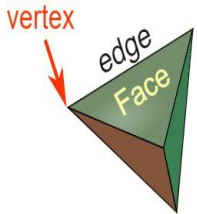
Dollar Tree





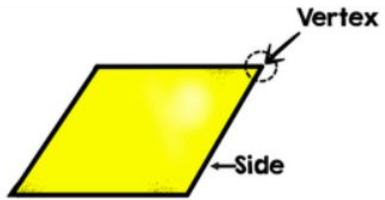
1000 +

1000 cm



A vertex is a corner.  
An edge is a line segment between faces.  
A face is a single flat surface.

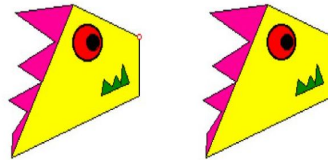
3D



**A two-dimensional, or flat shape with 4 sides and 4 vertices.**

2D

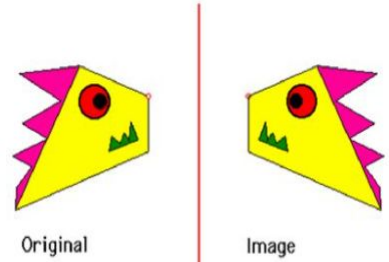
Translation (slide)  
• a slide without turning.



Original

Image

## Reflections are Flips

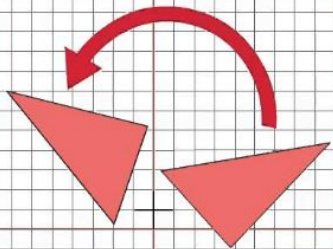


Original

Image

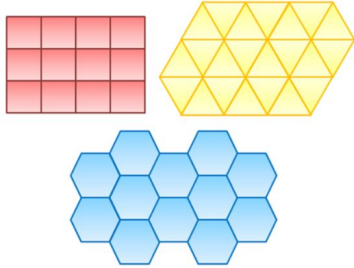
## Rotation

A rotation turns a shape.

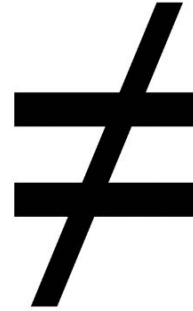


# Measurement: Tiling

(Non-standard Units)

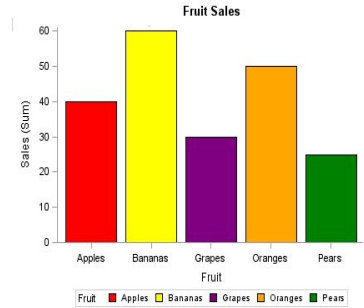


# Measurement: (Non-standard Units)



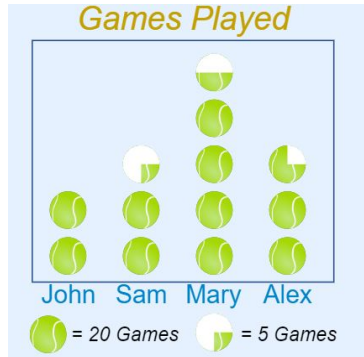
# Graph Features

Bar Graph



|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 |
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| 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 |
| 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 |

# Pictograph



|     |     |     |     |     |     |     |     |     |       |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910   |
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| 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970   |
| 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980   |
| 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990   |
| 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1,000 |

**LONGER**

**SHORTER**

**EVEN**

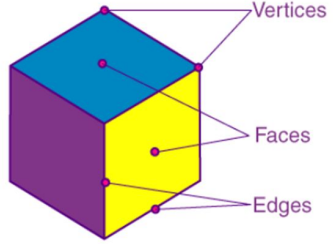
**GREATER  
Than**

**LESS  
Than**

**EQUAL**

**ODD**

**UNEQUAL**



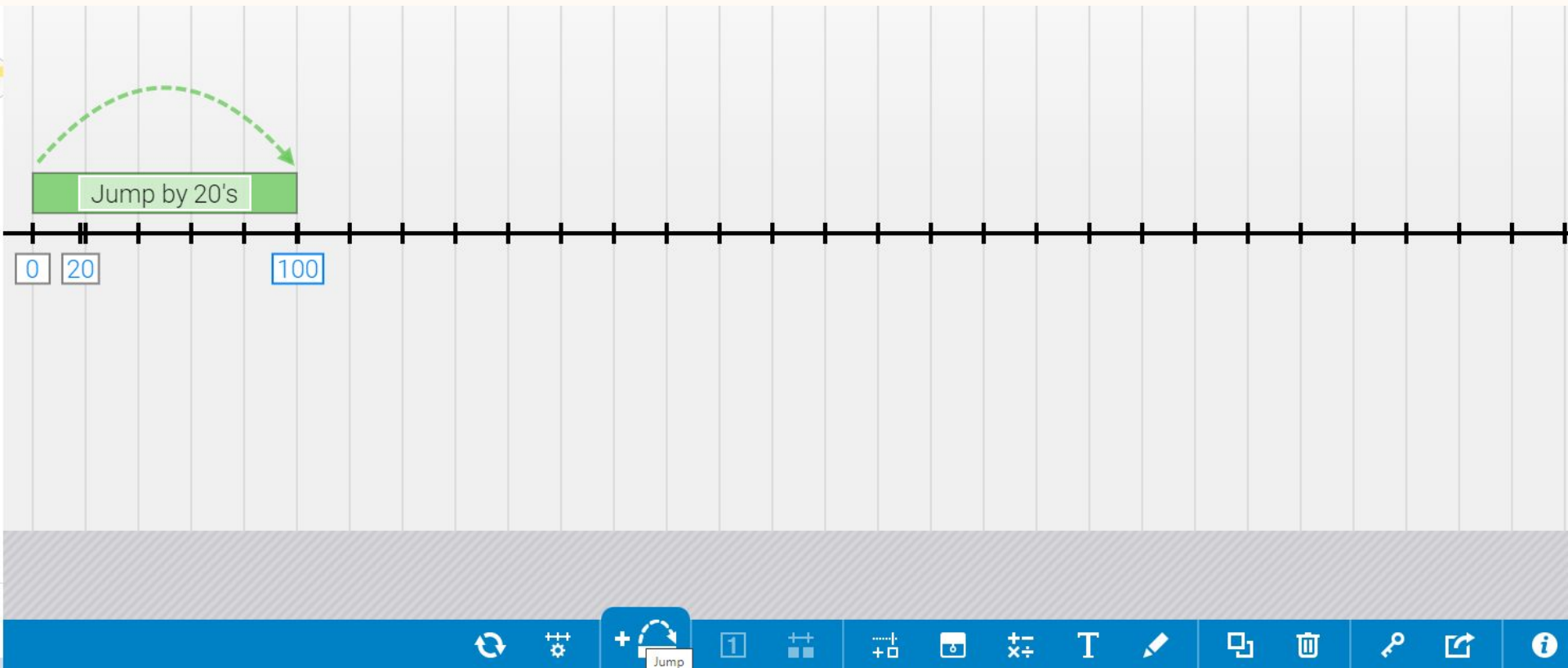
# Composing and Decomposing Numbers

| 120 chart |     |     |     |     |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0         | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
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| 120       |     |     |     |     |     |     |     |     |     |

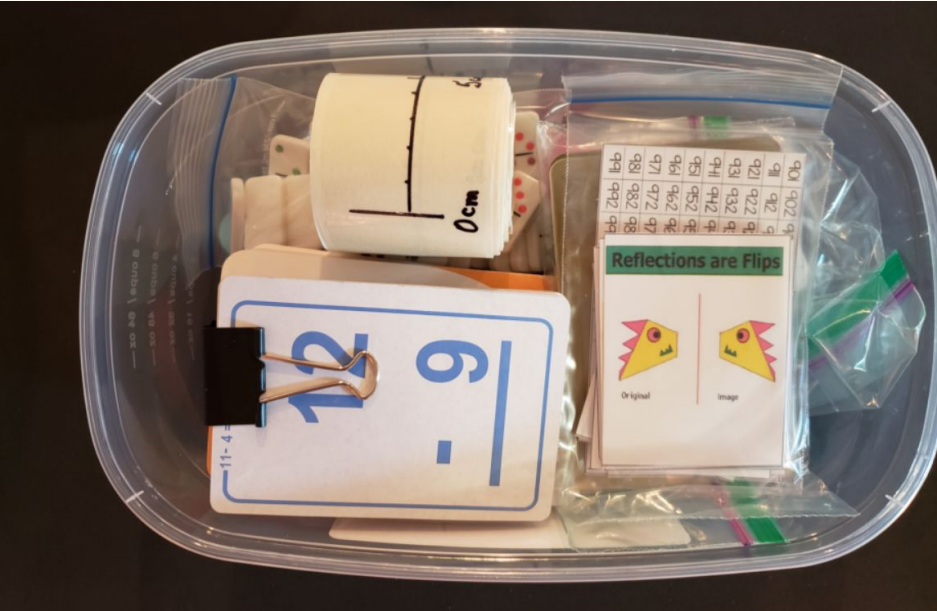
|  |  |
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|  |  |
|  |  |

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |


<https://apps.mathlearningcenter.org/number-line/>



# Finished kit - container from Dollarama



Container fits in a student desk or cubby.

The background features a large, light orange triangle on the left side, pointing towards the top right. The rest of the background is white. The text is positioned on the right side of the page.

# Place Value Templates

Copy back to back on 8.5 x 11  
paper and laminate

## Place Value Chart Beginning with Money (Penny, Dime, Loonie, \$5, \$10)




|   |   |   |  |   |
|---|---|---|--|---|
|   |   |   |  |   |
|  |  |  |  |  |

$$\boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}}$$



Place Value  
Template are  
saved in a shared  
folder based on  
the title headers  
on each of these  
slides.

# Place Value Chart Beginning with Money (Dime, Loonie, \$5, \$20, \$100)

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|   |   |   |   |   |   |
|  |  |  |  |  |  |

$$\square + \square + \square + \square + \square + \square$$






## Place Value Chart Beginning with Money (Loonie, \$5, \$10, \$50, \$100)

|   |   |   |  |   |
|---|---|---|--|---|
|   |   |   |  |   |
|  |  |  |  |  |

$$\square + \square + \square + \square + \square$$



## Place Value Chart Beginning with Money (Loonie, \$5, \$10, \$100, \$1000)

|                         |   |  |   |
|-------------------------|---|--|---|
|                         |   |  |   |
| THOUSAND<br>(\$1000.00) |  |  |  |

+  +  +






\$1000.00 = 100 000¢





## Place Value Chart Beginning with Money (Penny, Nickel, Dime, Quarters)

|   |  |  |   |
|---|--|--|---|
|   |  |  |   |
| Quarter  | Dime  | Nickel  | Penny  |

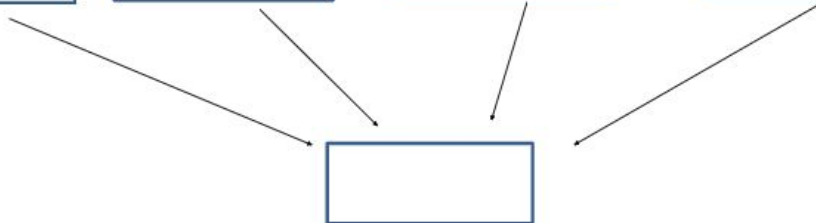
## Place Value Chart Beginning with Money (Penny, Nickel, Dime)

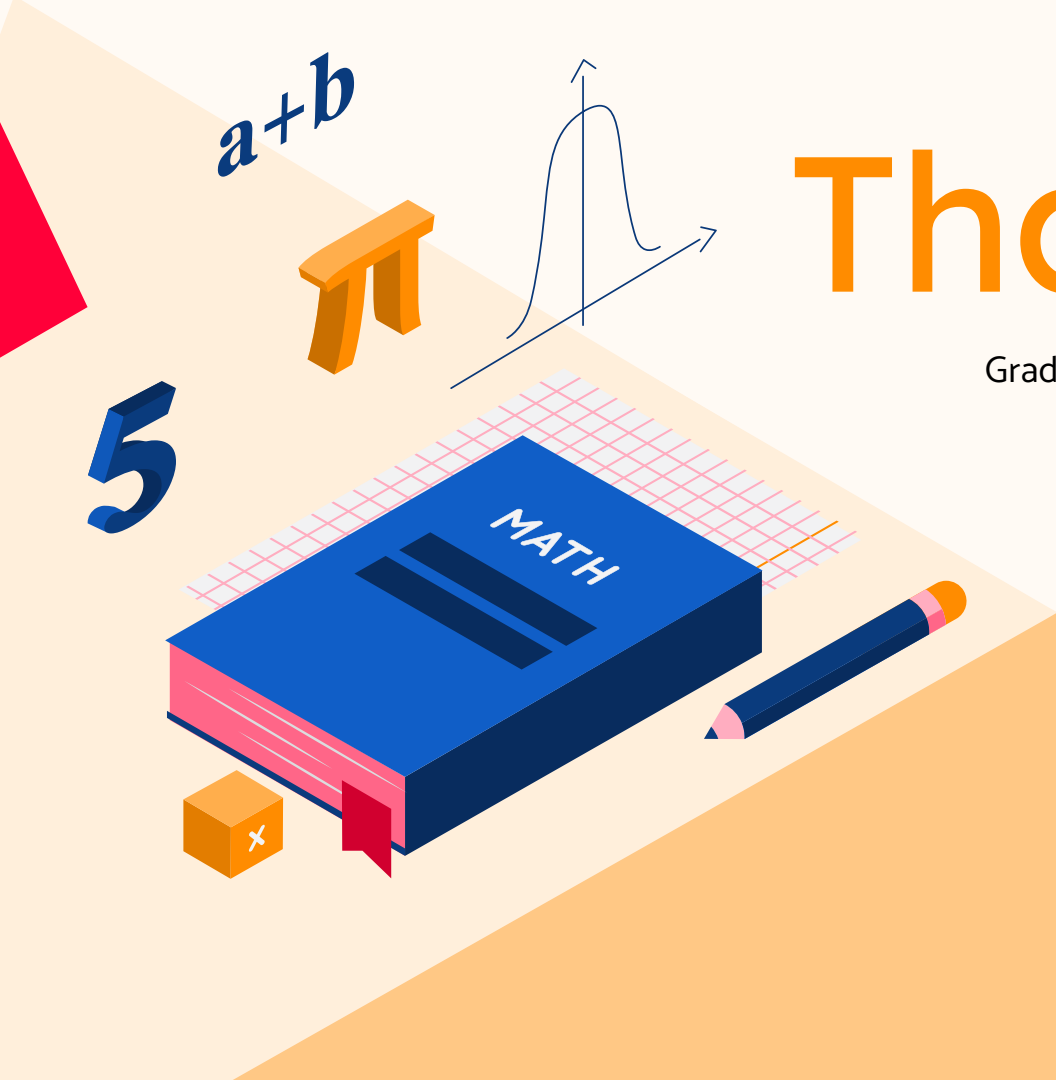
|  |  |   |
|--|--|---|
|  |  |   |
| Dime  | Nickel  | Penny  |

## Place Value Chart Beginning with Money (Penny, Nickel, Quarter, Loonie)

|  |   |  |   |
|--|---|--|---|
|  |   |  |   |
| Loonie  | Quarter  | Nickel  | Penny  |

$$\boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}} + \boxed{\phantom{000}}$$





# Thank You

Grade 2 Print Masters can be found [here](#).

## If You have any questions

Your local ARPDC Rep or

Mary Ann Baden

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Chris Zarski

[czarski@carcpd.ab.ca](mailto:czarski@carcpd.ab.ca)