## Representing, Comparing and Ordering Whole Numbers Applications

## Mathematical Ideas

Numeral representations are present in everyday life. Sometimes these numerals represent quantity and sometimes they don't.
For example, on this parking sign 30 min is representing the length of time (quantity) and the 9 and 6 are representing the times of the day.


Representing whole numbers in a variety of ways develops an understanding of number including its size and its relationship to other numbers.

For example, if we represent $30 \mathrm{~min}, 45 \mathrm{~min}$ and 60 min on a number line we can see the difference in the lengths of the times.

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## Helpful Information

## Tips

- When doing this activity make sure the size of the numbers your child is representing is appropriate.
- Organized concrete and visual representations allow your child to use their spatial sense to deepen their understanding of number and the relationships between numbers.

4 is less than 7 10 is greater than 7


## Mathematical Words/Symbols

Fewer - less than (<)
More - greater than (>)
Same as - equal to (=)
Digits - are the numerals 0 to 9 that form numbers. For example, the digits 2 and 7 can form the twodigit numbers 27 and 72 .
Place value - the value of any digit depending on its location in a number e.g., for the number 84 the place $\quad$ value of the 8 is 80 .

## Materials

Activity 1-3:

- choice of learning tools by mathies.ca


## Representing, Comparing and Ordering Whole Numbers Applications

## Selecting a Learning Tool to Represent Quantity

## Activity 1

## Set Up for the Activity:

- Open up mathies.ca learning tools page.


## How to Do the Activity:

1. Find whole number numeral representations in everyday contexts.
2. Discuss with your child if the numeral represents quantity or not.
3. For numerals that represent quantity, discuss which mathies learning tool is an appropriate choice to represent that quantity.
4. Have your child represent at least one of the quantities using the chosen tool.
5. Repeat activity as desired.

## Example:

Numeral Representation
Population of a village: 96
Set tool is selected to represent the population


Your child may represent 96 by making 10 sets of 10 and then remove 4.

## Let's Talk About It

Why did you pick this tool to represent your number?
What strategy did you use to represent the number?

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## Comparing Quantities Using a Learning Tool

## Set Up for the Activity:

- Open up mathies.ca learning tools page.


## How to Do the Activity:

1. Find two whole number numeral representations in everyday contexts that can be compared.
2. Have your child select an appropriate mathies learning tool to represent each of the two numbers.
3. Ask your child what comparisons can be made between the two numbers.
4. Repeat activity as desired.

## Example:

Grey Cup 2017 Final Score
Calgary: 24
Toronto: 27

Rekenrek Tool is selected to represent the two numbers


Your child may have each bead represent a point of the score and may compare the two numbers based on their spatial perception.

27 is greater than 24
24 is less than 27

## Let's Talk About It

Why did you pick this tool to represent your numbers?
What strategy did you use to compare the two numbers?

## Representing, Comparing and Ordering Whole Numbers Applications

## Ordering Numbers Using a Learning Tool

## Activity 3

## Set Up for the Activity:

- Open up mathies.ca learning tools page.


## How to Do the Activity:

1. Find four to six whole number numeral representations in everyday contexts that can be used to order.
2. Have your child select an appropriate mathies learning tool to represent each of the numbers.
3. Ask your child to order the numbers from least to greatest.
4. Repeat activity as desired.

## Example:

Cost of fruit per kilogram
Banana: 155 cents
Apple: 430 cents
Grapefruit: 415 cents
Orange: 410 cents

Your child may represent using the least number of coins and may order based on the relationship between the coin values.

Money tool is selected to represent these numbers


Ordered from least to greatest

| Banana | Orange | Grapefruit | Apple |
| :--- | :--- | :--- | :--- |
| (2) | 0 | 0 |  |

## Let's Talk About It

Why did you pick this tool to represent your numbers?
What strategy did you use to order this set of numbers?

