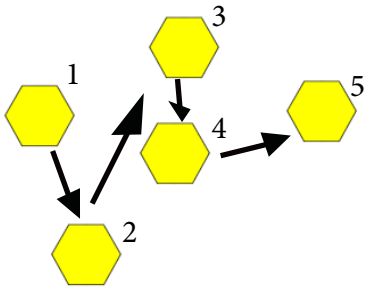
Counting Backwards From 50

Mathematical Ideas

It is important for children to count forward and backwards from a variety of starting points. This will help them to understand the size of the number in relation to other numbers.

When counting, the number words are always said in the same order.
One, two, three, four,... not four, two, one, three

Counting can begin with any item in a set. Each item must be counted only once (one to one correspondence). The quantity will always be the same for that set.



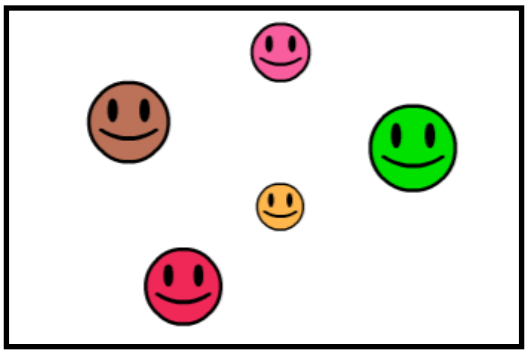
As you count forwards, the quantity increases.

As you count backwards, the quantity decreases.

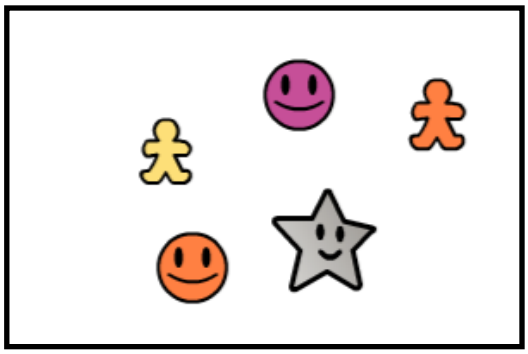
The last counting word tells us how many are in the set.

"There are five pattern blocks in this set."

Quantity is related to 'how many' rather than size, shape, or position. The quantity of a set stays the same even if the appearance of the set changes.



Set of 5 Objects



Set of 5 Objects

Counting Backwards From 50

Helpful Information

Tips

- Learning tools are used to explore mathematical ideas and are a way for children to share their thinking. Encourage your child to take the time to use the learning tools in each activity.
- Children are encouraged to move or touch the items while counting so they learn to count each item only once.
- Encourage your child to state what is being counted (e.g., 10, 20, 30 rods, not just 10, 20, 30)
- Tallies can help with tracking the count. Tally marks are set in groups of 5.

This tally count is 12.

- Organizing objects into groups of 2s, 5s, and 10s allows your child to count more efficiently.

Mathematical Words/Symbols

Counting on – is counting up from a numeric amount that you are given. For example, if you have 3 coins and you would like to count on another 4 coins, you can count "three, four, five, six, seven." When people count on they usually say the number they are counting from and then the other numbers.

Counting back – is counting back from a numeric amount that you are given. For example, if you have 10 coins and you would like to count back 4 coins, you can count "ten, nine, eight, seven, six." When people count back they usually say the number they are counting from and then the other numbers.

Digits – are the numerals 0 to 9 that form numbers. For example, the digits 2 and 7 can form the two-digit numbers 27 and 72.

Skip counting – usually means counting forwards or backwards by numbers other than 1, such as by twos (2, 4, 6, 8); by fives (20, 15, 10, 5); or by tens (40, 50, 60, 70).

Materials

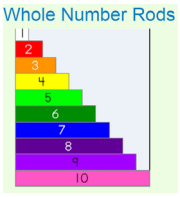
Activity 1 and 2 :
- Whole Number Rods

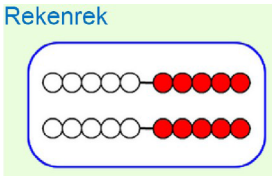
Activity 3:
- Rekenrek

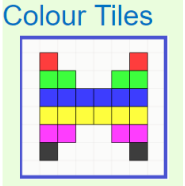
Activity 4:
- Colour Tiles

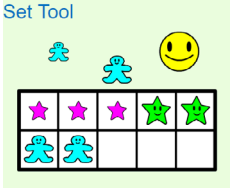
Activity 5:
- Set

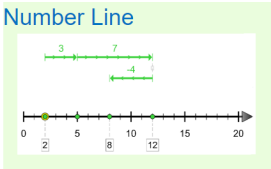
Activity 6:
- Number Line











Learning Tools and Games can be accessed at mathies.ca

Counting Backwards From 50

Counting Backwards by 1s Using Whole Number Rods

Activity 1

Set Up for the Activity:

- Open the Whole Number Rods learning tool.
  - » Place whole number rods end to end to form a train in the workspace. Use a mixture of 1-rods, 2-rods, and 5-rods such that the sum of the rods is 50 or less.
- Shuffle one set of number cards 2 to 6 and place them face down in a pile.

How to Do the Activity:

1. Show your child the train and ask the value of the train.
2. Have your child pick a card from the pile. The number on the card represents the number of 1-rods to be removed from the train.
   - » If the train does not have enough 1-rods, have your child trade rods.
3. As your child removes the 1-rods, have your child count backwards by ones out loud. Record what is said.
4. Share your record with your child. Have your child check the count.
5. Repeat activity as desired.

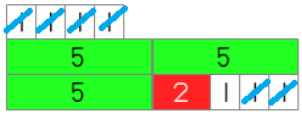
Example:

Starting train:

Your child may rearrange the rods to determine the value of the train.

Value of the original train is 24 units.

6 Six 1-rods to be removed



Count: *24*, *23*, *22*, *21*, *20*, *19*, *18*

The new train has a value of 18 units.

Let's Talk About It

How can you count backwards by ones when you have 2-rods and 5-rods? Is there another way?
How can you use the unit train on the workspace to help you count and check?

Counting Backwards From 50

Counting Backwards by 2s and 5s Using Whole Number Rods

Activity 2

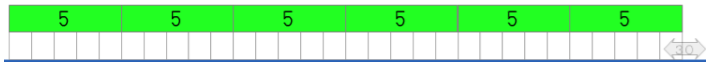
Set Up for the Activity:

- Open the Whole Number Rods learning tool.
- Shuffle one set of number cards 4 to 6 and place them face down in a pile.

How to Do the Activity:

1. Place six of the 5-rods end to end to form a train just above the unit train at the bottom of the Whole Number Rods workspace.
2. Have your child count by fives to determine the value or length of the train.
3. Have your child pick a card from the pile. The number on the card represents the number of 5-rods to be removed from the train.
4. As your child removes the 5-rods, have your child count backwards from the value of the train by fives.
5. As your child counts out loud, record what is said.
6. Share your record with your child. Have your child check the count.
7. Repeat activity using fifteen to twenty-five 2-rods and have your child count backwards by 2s.

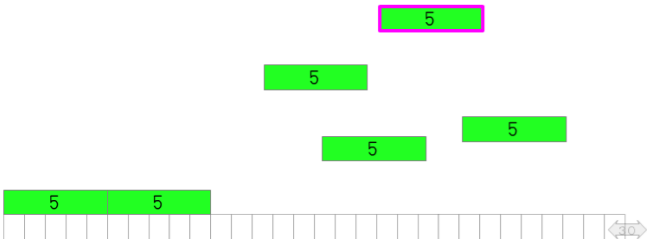
Example:



Count: *5*, *10*, *15*, *20*, *25*, *30*
The train has a value of 30.

4 Four 5-rods to be removed from the train

Your child may check the count by counting up from the final count to get to the original value of the train.



Count: *30*, *25*, *20*, *15*, *10*
The train now has a value of 10.

Let's Talk About It

When might you count by fives?
Is it hard or easy to count backwards by fives? Why? How can you get better at it?
How can you be sure you have counted all parts of your train?

Counting Backwards by 2s and 5s Using the Rekenrek

Activity 3

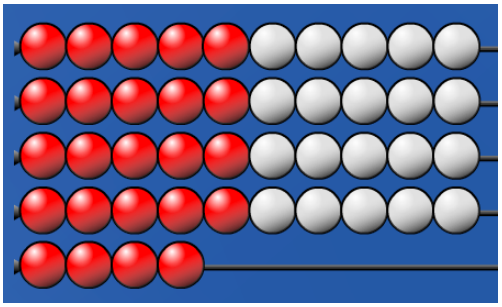
Set Up for the Activity:

- Open the Rekenrek learning tool.
  - » Show five racks of beads.

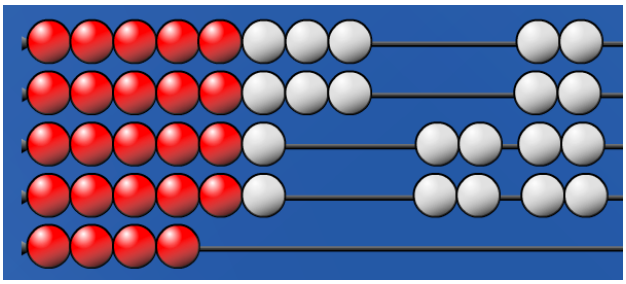
How to Do the Activity:

1. Place an even number of beads such that 30 to 50 of them are on the left side of the Rekenrek racks.
2. Ask your child how many beads are shown.
3. Have your child remove six sets of two beads from the beads on the left. As the beads are moved have your child count backwards by 2s.
4. Share your record with your child. Have your child check the count.
5. Repeat activity with 30, 35, 40, 45 or 50 beads on the left side. This time have your child move six sets of five beads and count backwards by 5s.

Example:



44 beads



Counting backwards from 44:
42, 40, 38, 36, 34, 32

Your child may check the final count by making groups of 10 and then count by 10 and count on any remaining beads.

Let's Talk About It

What pattern do you notice when you count backwards by 2s?
What pattern do you notice when you count backwards by 5s?

Counting Backwards by 2s and 5s Using Colour Tiles

Activity 4

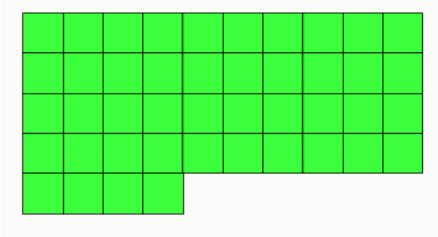
Set Up for the Game:

- Open the Colour Tiles learning tool.
  - » Select regular six.
  - » Place an even number between 30 and 50 of the same colour tiles on the workspace.

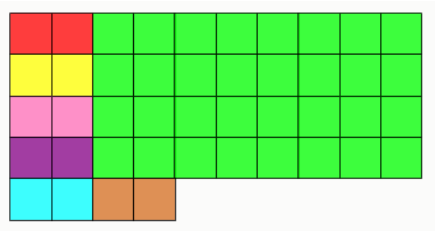
How to Play the Game:

1. Ask your child to count the tiles. Check the total using the counter icon #
2. Tell your child that the task is to skip count backwards by 2's six times from the starting number.
3. Have your child change 6 pairs of tiles to a different colour.
   - » Select the pair of squares (tap both to highlight them)
   - » Use the colour palette icon and select a new colour
   - » Be sure to unselect the pair of tiles before changing the next pair.
4. Ask your child to remove each pair of tiles and place them in the recycling bin. As each pair of tiles are removed have your child count backwards from the original number by twos.
5. When your child has finished counting backwards, confirm the final count with the total given by the counter icon.
6. Repeat activity starting with 30, 35, 40, 45 or 50 of the same colour tiles on the workspace. This time, have your child change the colour of six sets of 5 tiles. Have your child count backwards by 5s.

Example:



Count: 10, 20, 30, 40, 44 tiles



6 sets of pairs with a different colour

Counting backwards from 44 by 2s:
42, 40, 38, 36, 34, 32

Your child may check the count by counting up from the last count six times to see if this final count is the original amount of tiles.

Let's Talk About It

Why is counting backwards a good skill to have?
Is it hard or easy to count backwards by twos or fives?

Counting Backwards From 50

Skip Counting Backwards by 2s and 5s Using the Set Tool

Activity 5

Set Up for the Activity:

- Open the Set learning tool.
  - » Work in Create mode.
  - » Place 30 to 50 objects on the workspace such that you have an even number of them. All the objects should be the same size, shape and colour. You may wish to use the multiplier tool to help you do this quickly.

How to Do the Activity:

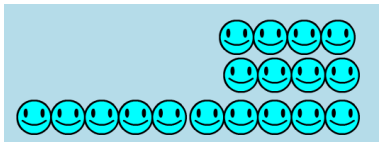
1. Ask your child to count the objects. Check the total using the counter icon
2. Tell your child that the task is to skip count backwards (6 times) by 2's from the starting number.
3. Have your child change one attribute of a pair of objects, then change an attribute of a second pair until there are six pairs that are each different from the original sets.
4. Select the pair of objects (tap both to highlight them) and then select a new attribute. Be sure to unselect them before changing the next pair.
5. Ask your child to remove each pair of objects and place them in the recycling bin. As each pair of objects are removed have your child count backwards from the original number of objects by twos.
6. When your child has finished counting backwards, confirm the final count with the total counter icon.
7. Repeat activity starting with 30, 35, 40, 45 or 50 objects on the workspace. This time, have your child change the colour of six sets of 5 objects. Have your child count backwards from the original number by 5s.

Example:

There are 30 objects.

Your child may check the count by counting up from the last count six times to see if this final count is the original amount of tiles.

Change one attribute of 6 pairs of objects.



Counting backwards from 30 by 2s:
30, 28, 26, 24, 22, 20, 18 objects

Let's Talk About It

Why is counting backwards a good skill to have?
Is it hard or easy to count backwards by twos? Why? How can you get better at it?
How many objects did you put in the recycling bin?
Why did it help to change the pairs so they look different?

Counting Backwards From 50

Counting Backwards by 1s and 5s from 50 Using a Number

Activity 6

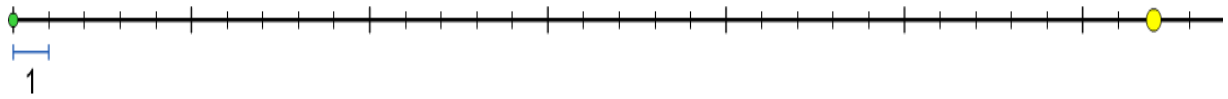
Set Up for the Activity:

- Open the Number Line learning tool.
  - » Select 0 to 50.
  - » Use the number line style selector to change the number line style to a number ribbon.
  - » Use the label selector to the remove number line numbers.
  - » Put a point on one of the hash marks on the number line by clicking on that hash mark.

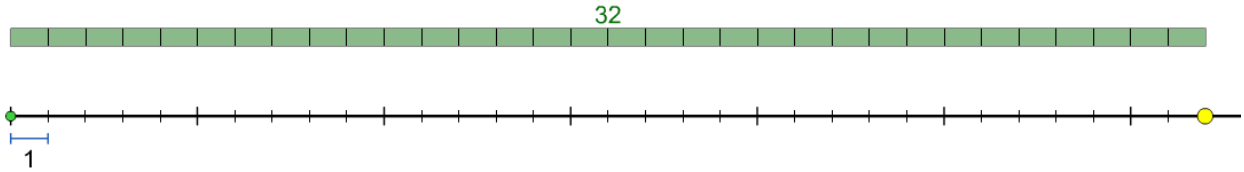
How to Do the Activity:

1. Ask your child to count the number of spaces between the hash marks on the number line from 0 (the left end) up to your point.
2. Have your child use a number ribbon to draw a ribbon from 0 to your point.
3. Ask your child to count the sections on the ribbon. Point out that the number above the ribbon matches both counts.
4. Ask your child to count back by 1s, six times. Have your child drag the number ribbon back towards the left while counting backwards. Pause at the end of each section to allow time to match the counts to the ribbon length.
5. Clear the workspace.
6. Repeat activity starting with a point at one of the major hash marks on the number line (every 5th hash mark) and have your child count backwards by 5s.

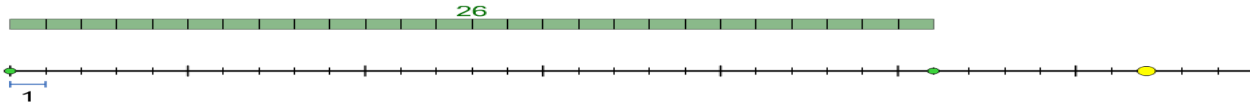
Example:



Count: 5, 10, 15, 20, 25, 30, 31, 32 spaces to the point



Number Ribbon: 32 sections



Counting backwards from 32: 31, 30, 29, 28, 27, 26

Let's Talk About It

How do you know you counted all the spaces?
What does the green dot mean?
If you move the number ribbon back towards the yellow dot, what will happen? Let's check.
Why did that happen?