



Counting Forward To 50

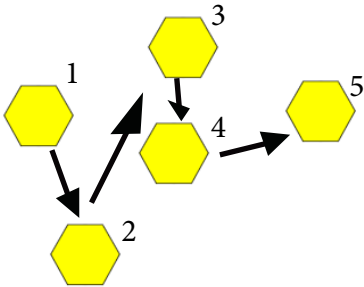
Mathematical Ideas

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.



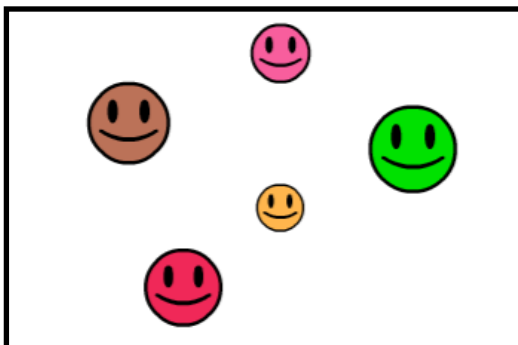
As you count forwards, the quantity increases.

As you count backwards, the quantity decreases.

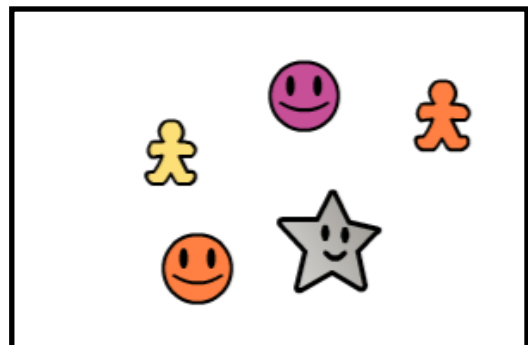
The last counting word tells us how many are in the set.

“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



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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.

Helpful Information

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.

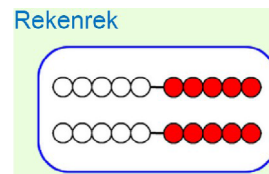
Digits - are the numerals 0 to 9 that form numbers. For example, the digits 2 and 7 can form the two-digit numbers 27 and 72.

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

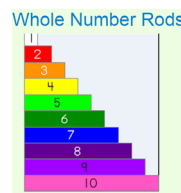
Activity 1:

- Rekenrek



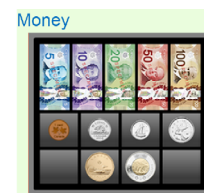
Activity 2 and 5:

- Whole Number Rods



Activity 3 and 4:

- Money



Learning Tools and Games can be accessed at mathies.ca



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Counting On By Twos

Activity 1

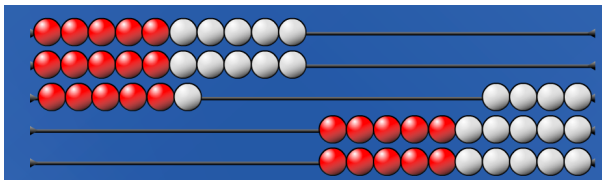
Set Up for the Activity:

- Open the Rekenrek learning tool.
 - » Show five racks.
 - ◇ top two racks with ten beads on the left
 - ◇ third rack with some beads on the left and some on the right
 - ◇ fourth and fifth rack with the ten beads on the right
- Shuffle one set of number cards 4 to 10 and place them face down in a pile.

How to Do the Activity:

1. Ask your child how many beads are shown on the left side of top three racks.
2. Have your child pick a card from the pile. The number on the card represents the number of sets of 2 beads.
3. Have your child slide two beads at a time from right to left on the racks until the number of sets of 2 indicated by the card has been moved.
4. Have your child count out loud by twos from the original amount of beads to determine the total number of beads now shown. Record what is said.
5. Share this record with your child. Have your child check the count.
6. Repeat activity as desired.

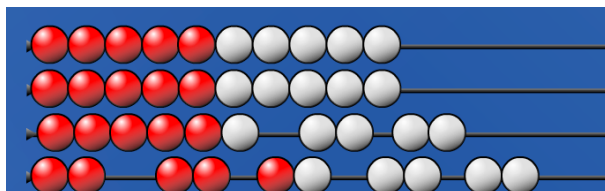
Example:



26 beads on the left side of the top three racks

7

7 sets of 2 beads added on



Count from 26: 28, 30, 32, 34, 36, 38, 40

Your child may check the count, by making groups of 5 and then count by 5s and add on any remaining beads.

Let's Talk About It

Why do we sometimes count by twos?

How can you keep track of how many sets of two beads you moved?

Does it help to make groups of ten or five? Why or why not?



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Counting On By 5s

Activity 2

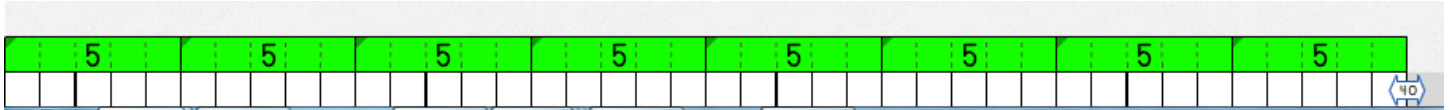
Set Up for the Activity:

- Open the Whole Number Rods learning tool
 - » Set the Unit Train at the Bottom of the tool to one of the numbers 30, 35, 40, 45, or 50

How to Do the Activity:

1. Ask your child how long the unit train is at the bottom of the tool.
2. Ask your child how many 5-rods would be needed to make the same length as the unit train. Have your child place the 5-rods on the unit train to confirm.
3. Have your child count by fives, record what is said.
 - » If your child's final count is different than the length of the unit train, have them find the error in the count.
4. Repeat activity as desired.

Example:



Count: 5, 10, 15, 20, 25, 30, 35, 40

Your child may use the fact that four tens make 40 to help with knowing how many fives are needed.

Let's Talk About It

What do you notice about the relationship between the number of 1-rods on the unit train and the number of 5-rods you needed to make the train?
Why is counting by five a good skill to have?



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Skip Counting with Money

Activity 3

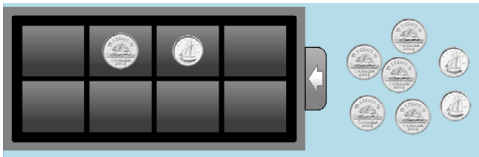
Set Up for the Activity:

- Open the Money learning tool.
 - » Customize the money tray to only show nickels and dimes.

How to Do the Activity:

1. Drag up to 10 nickels into the workspace.
2. Ask your child to tell you how many nickels are in the workspace.
3. Ask your child to tell you how many cents are in the workspace. Encourage your child to count by fives.
4. Clear the workspace.
5. Drag up to 5 dimes into the workspace.
6. Ask your child to tell you how many dimes are in the workspace.
7. Ask your child to tell you how many cents are in the workspace. Encourage your child to count by tens.
8. Clear the workspace.
9. Drag a mixture of nickels and dimes into the workspace so that the amount of cents is 50 or less.
10. Ask your child to tell you how many coins are in the workspace.
11. Ask your child to tell you how many cents are in the workspace.
12. Repeat activity as desired.

Example for mixture of dimes and nickels



Count: 7 coins

Your child may pair up the nickels and count by tens as much as possible.



Count: 10, 20, 30, 40, 45 cents

Let's Talk About It

Check your count by counting another way.
Why does it help to put the nickels together?
Why do you get the same count if you count by fives or if you make groups of ten?



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Who Has More Pennies?

Activity 4

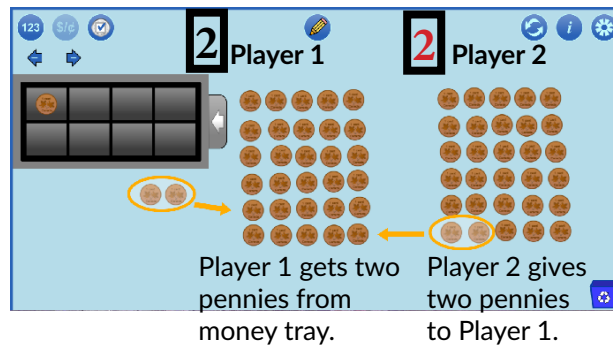
Set Up for the Game:

- Open the Money learning tool.
 - » Customize the money tray to only show pennies.
 - » Make the coins smaller so they will fit more easily on the workspace.
- Shuffle together two sets of red number cards and two sets of black number cards 1 to 7 (total of 20 number cards) and place them face down in a pile.

How to Play the Game:

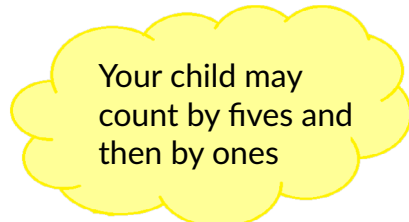
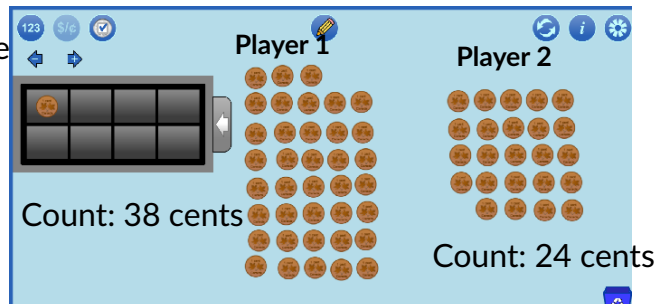
1. Ask your child to count out 30 pennies from the money tray to give each player at the start.
2. Decide who goes first.
3. For each round, players take turns picking a card from the pile.
 - » If the card is black, the player gets that many pennies from the money tray.
 - » If the card is red, the player gives that many pennies to the other player. If the player doesn't have enough pennies, all the pennies are given and the turn is ended.
4. Play for 5 rounds.
5. Have your child count out loud the number of pennies each player has at the end of the game. The player with the most pennies wins.

Example:



After 5 rounds:

Player 1 wins the game



Let's Talk About It

- How can you be sure you count your pennies correctly?
- How can we sort the pennies to make it easier to count?
- Can we play this game with dimes? How will it work?



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Skip Counting by 2s, 5s, and 10s

Activity 5

Set Up for the Activity:

- Open the Whole Number Rods learning tool.
 - » Place between ten and twenty 2-rods end to end to form trains in the workspace.
- Shuffle two sets of number cards 2 to 6 and place them face down in a pile.

How to Do the Activity:

1. Show your child the trains and ask the combined value of the trains.
2. Have your child pick a card. The number on the card represents the number of 2-rods needed to create a new train.
3. Have your child create the new train.
4. Ask your child to count out loud to determine the combined value of all the trains. Encourage your child to count on from the initial value of the trains determined in step #2. Record what is said.
5. Share your record with your child. Have your child check the count.
6. Repeat the activity starting with 5-rods. The number card now represents the number of 5-rods.
7. Repeat the activity starting with 10-rods. The number card now represents the number of 10-rods.

Example:

Starting with fifteen 2-rods.



Combined value of the trains: 30 units.

6 Six 2-rods to create the new train



Count on from 30: 32, 34, 36, 38, 40, 42

Combined value of all the trains: 42 units.

Your child may check the count by rearranging the rods into 4 trains with each train having a value of 10 and 1 train having a value of 2.

Let's Talk About It

- If your train has four more 2-rods, what would be the final count?
If your train has three less 2-rods, what would be the final count?