

The PNC Christmas Price Index

Suggested Grade & Mastery Level

High School – All Levels

Suggested Time

Three to four class periods

Teacher Background

Begun over 24 years ago as a way to engage clients, the annual PNC Christmas Price Index has become one of PNC's most popular and anticipated economic reports. PNC is a highly diversified and growing financial services organization spanning the retail, business and corporate markets.

The PNC Christmas Price Index is an index of the current costs of the goods and services purchased by "my true love" in the classic holiday song, "The Twelve Days of Christmas." Calculated by PNC Wealth Management, the PNC Christmas Price Index reflects changes in the economy and mirrors the results of The Consumer Price Index.

The Consumer Price Index measures the change in the prices of goods and services that reflect the spending habits of the average American. Its percent change is widely used as a measure of inflation. Higher than expected inflation can cause the stock market to become bearish.

The purpose of these activities is to use the PNC Christmas Price Index to analyze the cost of goods and services and the impact of rising and/or declining costs on investments in your teams' portfolios in The Stock Market Game™.

As a special service to the public, PNC Executive Vice President, Jim Dunigan, will conduct "PNC's Christmas Price Index Live Chat" at 10:30AM ET, Tuesday, Dec. 16, 2008.

Additional information about the Live Chat and the PNC Christmas Price Index is available at:

<http://www.pncchristmaspriceindex.com>

Vocabulary

Consumer Price Index (CPI): A gauge of inflation that measures changes in the prices of basic goods and services compiled monthly by the U.S. Bureau of Labor Statistics. It tracks housing, food, clothing, transportation, medical care and education. The CPI is used as a benchmark for making adjustments in Social Security payments, wages, pensions and tax brackets to keep them in tune with the buying power of the dollar.

Deflation: Is a widespread decline in prices that also has the potential to undermine the economy by stifling production and increasing unemployment.

Hyperinflation: Occurs when prices rise by 100% or more annually. It can destroy economic, and sometimes political, stability by driving the price of necessities higher than people can afford.

Inflation: A persistent increase in prices, often triggered when demand for goods is greater than the available supply or when unemployment is low and workers can command higher salaries. U.S. Federal Reserve Bank and central banks in other nations try to keep inflation in check by decreasing the money supply, making it more difficult to borrow and thus slowing expansion.

Performance Objectives

The students will be able to:

- Define and use the PNC Christmas Price Index and the Consumer Price Index.
- Distinguish between the index price and true price.
- Compare the price of each of the twelve gifts purchased over time.
- Analyze trends on the PNC Christmas Price Index and the Consumer Price Index.

Subject Areas

Family Consumer Sciences, Language Arts, Mathematics, Economics

Materials

Fact Sheet 1: The Twelve Days of Christmas

Fact Sheet 2: True Loves Face Most Expensive Christmas Ever

Activity Sheet 1: Consumer Price Index

Activity Sheet 2: Comparing Two Years

Activity Sheet 3: Comparing Two Indexes

Activity Sheet 4: Figuring Out Your Gift List

Springboard Activity

Distribute **Fact Sheet 1** and ask the students to identify the twelve gifts the song's True Love purchased. Make a list on the board.

ASK

What do you think each of these gifts would cost today? Why?

Have your students work in their SMG teams to predict pricing for each of the twelve gifts from the song. They should create a range from the lowest to highest.

Inform students of the actual amount: \$21,080.10 (2008).

NOTE: PNC releases its Christmas Price Index annually on the Monday after Thanksgiving. For the most up to date information, visit <http://www.pncchristmaspriceindex.com>

Ask how an analyst would figure out the cost in today's dollars. Discuss.

Display the chart found on <http://www.pncchristmaspriceindex.com>

Ask the students to predict what may cause the price of the same gift purchased each year to rise over 24 years.

In which year/years of the last 24 years was the cost the lowest?

In which year/years was the cost the highest?

Between which two years did the price drop the most?

Between which two years did the price increase the most?

Explain that they will use the information provided by the PNC Christmas Price Index report to learn how to use price indexes as predictors of market trends. Be sure to explain the difference between the index cost and true value cost of the items:

The PNC Christmas Price Index is an index of the current costs of the gifts given by the True Love to the singer of the song "The Twelve Days of Christmas."

The “True Cost of Christmas” is the cumulative cost of all the gifts with the repetitions listed in the song.

Activities

Using the Information

Distribute **Fact Sheet 2**. Have your students read the press release and discuss influences on the price of the twelve days of Christmas.

NOTE: PNC releases its Christmas Price Index annually on the Monday after Thanksgiving. For the most up to date information, visit <http://www.pncchristmaspriceindex.com>

ASK

Why did the cost of the total gifts in “The Twelve Days of Christmas” go up 8.1 percent from 2007 to 2008?

What accounted for the largest increase in price? Why?

If you earn minimum wage, like the milkmaids, what is the value of your purchasing power? Why?

What accounts for the increase in the price of gold rings? If the value of the dollar continues to fall, what may be the impact on the price of gold rings? Why?

What may be the impact of the 8.1% price increase on the economy?

Using the PNC Christmas Price Index Chart (2008)

Using the PNC Christmas Price Index chart in **Fact Sheet 2**, please have your students answer the following:

Which item or service cost the least in 2007? In 2008?

Which item or service cost the most in 2007? In 2008?

Which item or service had the largest change in price over the two years? Why?

Which item or service had the biggest increase in price over the two years? Why?

Which item or service had the largest decrease in price over the two years? Why?

Which service or item had the biggest impact on the overall index cost in 2007? Why?

Which service or item had the biggest impact on the overall index cost in 2008? Why?

Using Interactive Price Charts

Go to: <http://www.pncchristmaspriceindex.com>

Use the Information to complete **Activity Sheet 2, Part One**. Review the answers with the students

Complete **Activity Sheet 2, Part Two**. Review the answers with the students.

Discuss the difference between the cost of goods and services and the possible impact this comparison may have on their SMG portfolios.

Comparing to the Consumer Price Index

Remind students:

The PNC Christmas Price Index is an index of the current costs of the gifts given by the True Love to the singer of the song “The Twelve Days of Christmas.” Calculated by PNC Wealth Management, it has consistently reflected changes in the economy and continues to do so in the 24th anniversary version. The rate of increase each year closely mirrors the results of The Consumer Price Index. It is a fun way to measure consumer spending and trends in the economy.

Explain that today the students will examine how closely the PNC Christmas Price Index mirrors the Consumer Price Index by comparing the two over several years.

Distribute and complete **Activity Sheet 3**.

Assessment

Based on the PNC Christmas Price Index performance over the last 24 years, what do you think will happen to the index next year? Why? What will that tell consumers about the economy near the end of the years around Christmastime? Explain?

Application

The Consumer Price Index is one of the indicators of the US economy’s overall performance. Analysts use it to predict how well certain industry sectors will perform. Please complete **Activity Sheet 1**.

Enrichment

Please complete **Activity Sheet 4**.

Fact Sheet 1: The Twelve Days of Christmas

On the first day of Christmas,
my true love sent to me
A partridge in a pear tree.

On the second day of Christmas,
my true love sent to me
Two turtle doves,
And a partridge in a pear tree.

On the third day of Christmas,
my true love sent to me
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the fourth day of Christmas,
my true love sent to me
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the fifth day of Christmas,
my true love sent to me
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the sixth day of Christmas,
my true love sent to me
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the seventh day of Christmas,
my true love sent to me
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the eighth day of Christmas,
my true love sent to me
Eight maids a-milking,
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the ninth day of Christmas,
my true love sent to me
Nine ladies dancing,
Eight maids a-milking,
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the tenth day of Christmas,
my true love sent to me
Ten lords a-leaping,
Nine ladies dancing,
Eight maids a-milking,
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the eleventh day of Christmas,
my true love sent to me
Eleven pipers piping,
Ten lords a-leaping,
Nine ladies dancing,
Eight maids a-milking,
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree.

On the twelfth day of Christmas,
my true love sent to me
Twelve drummers drumming,
Eleven pipers piping,
Ten lords a-leaping,
Nine ladies dancing,
Eight maids a-milking,
Seven swans a-swimming,
Six geese a-laying,
Five golden rings,
Four calling birds,
Three French hens,
Two turtle doves,
And a partridge in a pear tree!

Fact Sheet 2: True Loves Face Most Expensive Christmas Ever

TRUE LOVES TO FACE MOST EXPENSIVE CHRISTMAS EVER AS PNC CHRISTMAS PRICE INDEX JUMPS 8.1 PERCENT IN 2008

Cost of “The Twelve Days of Christmas” Song Items Reflect Consumer Pricing Trends; Interactive Web Site Provides Teachers and Students With Insights on U.S. Economy

PITTSBURGH, Dec. 1, 2008 – The PNC Christmas Price Index (CPI) increased by a lavish 8.1 percent over last year, the second biggest leap in the history of the whimsical economic analysis by PNC Wealth Management based on the cost of gifts in the holiday classic, “The Twelve Days of Christmas.”

According to the 24th annual survey, the cost of the PNC CPI is \$21,080 in 2008, \$1,573 more than last year. The PNC CPI exceeds the U.S. government’s Consumer Price Index (CPI) – the widely used measure of inflation calculated by the Bureau of Labor Statistics. The Consumer Price Index is up 4.9 percent this year.

The Seven Swans-a-Swimming proved to be a driver of this year’s index, carrying the greatest weight with a whopping 33.3 percent increase due to their scarcity. True Loves will spend \$5,600 this year for Swans compared with \$4,200 in 2007, accounting for \$1,400 of the \$1,573 increase. The Swans typically have the largest swings in price in the PNC CPI.

“Omitting the Seven Swans-a-Swimming may be a tempting way for a True Love to hold the line on costs, but one would be advised to proceed with caution,” warned James Dunigan, managing executive of investments for PNC Wealth Management.

Each year, the Christmas Price Index reflects trends in the broader economy. This year, commodities prices, concerns about increased energy and shipping costs, jobs and a second straight minimum wage increase were major factors in the cost, according to Dunigan. The PNC CPI’s sources range from retailers to the National Aviary in Pittsburgh and Philadanco, a modern dance company in Philadelphia.

High Prices Are for the Birds

Large percentage increases were also seen in Turtle Doves (37.5 percent, to \$56.00 from \$40.00); Partridges (33.3 percent, to \$20.00 from \$15.00) and Pear Trees (33.3 percent, to \$199.99 from \$149.99), according to PNC.

There is good news, however. True Loves will pay less for the Five Gold Rings this year. Retail prices dropped by 11.4 percent (to \$349.95 from \$395.00) as retailers are trying to move luxury merchandise in light of concerns with the slowing economy.

Two other costs in the CPI dropped this year: Three French Hens and Six Geese-a-Laying. This year the hens cost \$30.00, a drop of 33.3 percent over last year, and the geese cost \$240.00, falling one-third. Four Calling Birds remained steady, costing \$599.96.

Another Pay Raise for the Milkmaids

As the only unskilled laborers in the Christmas Price Index, the eight Maids-a-Milking received a raise for the second straight year, due to another increase in the federal minimum wage. Before 2007, they had not received a raise since 1997.



The federal minimum wage increased this year to \$6.55 per hour, following last year's \$5.85. In the last two years, the Maids-a-Milking have seen their wages rise by \$1.40 per hour, an increase of 27 percent. Still, the maids will cost the True Love \$52.40 this year, only \$5.60 more than a year ago, a relative bargain in the PNC CPI.

The cost of most performers in the index — the Drummers Drumming, Pipers Piping and Lords-a-Leaping — jumped a modest 3 percent, essentially a cost-of-living increase, reflecting the current labor market in which the unemployment rate rose to 6.1 percent after sitting below 5 percent for much of the decade. Only the price for the Ladies Dancing was unchanged this year.

Cyber Prices: The Cost of Convenience

For those True Loves who prefer the convenience of shopping online, PNC Wealth Management calculates the cost of “The Twelve Days of Christmas” gifts purchased on the Web.

This year, the trends identified in the traditional index are repeated in the Internet version, with an overall price growth of 2.8 percent, significantly less than the traditional PNC CPI increase of 8.1 percent.

True Loves will pay a grand total of \$31,957 to buy the items online, almost \$11,000 more than in the traditional index.

Seven of the 12 items in the Internet Index stayed even with 2007. Among them, Swans-a-Swimming. But they still cost significantly more to buy online at \$7,035.

“In general, Internet prices are higher than their non-Internet counterparts because of shipping costs for birds and the convenience factor of shopping online,” Dunigan said.

2008: Most Expensive Christmas Ever

As part of its annual tradition, PNC Wealth Management also tabulates the “True Cost of Christmas,” which is the total cost of items gifted by a True Love who repeats all of the song's verses. This holiday season, very generous True Loves will pay more than ever before — \$86,609—for all 364 items, up from \$78,100 in 2007, a staggering 10.9 percent increase.

Special Present: Updated Web Site

For a historical look at PNC's Index, please visit our updated Web site at www.pncchristmaspriceindex.com.

Each year, educators across the country use the Christmas Price Index to teach economic trends to students of all ages. With that in mind, this year's site includes interactive activities, annual results and PNC CPI trends in a Flash presentation, MP3 download, games and much more. For the second straight year, Jim Dunigan will present an interactive live online video chat about this year's results at 10:30 a.m. ET on Dec. 16, 2008.

Educators who visit the site will also find a lesson using the Christmas Price Index from The Stock Market Game™ (SMG) program, America's premier educational stock market simulation. Available in all 50 states for grades 4-12, the SMG program teaches children fundamental investment skills while applying their core academic skills. For more information visit www.stockmarketgame.org.

The PNC Financial Services Group, Inc. (www.pnc.com) is one of the nation's largest diversified financial services organizations providing retail and business banking; specialized services for corporations and government entities, including corporate banking, real estate finance and asset-based lending; wealth management; asset management and global fund services.

PNC Christmas Price Index - 2008

	Traditional			Internet		
	2007	2008	% Change 2008/07	2007	2008	% Change 2008/07
One Partridge in a Pear Tree	\$ 164.99	\$ 219.99	33.3%	\$ 224.94	\$ 235.00	4.5%
Partridge	\$ 15.00	\$ 20.00	33.3%	\$ 75.00	\$ 85.00	13.3%
Pear Tree	\$ 149.99	\$ 199.99	33.3%	\$ 149.94	\$ 150.00	0.0%
Two Turtle Doves	\$ 40.00	\$ 55.00	37.5%	\$ 130.00	\$ 130.00	0.0%
Three French Hen	\$ 45.00	\$ 30.00	-33.3%	\$ 195.00	\$ 195.00	0.0%
Four Calling Birds	\$ 599.96	\$ 599.96	0.0%	\$ 455.00	\$ 475.00	4.4%
Five Gold Rings	\$ 395.00	\$ 349.95	-11.4%	\$ 329.75	\$ 329.75	0.0%
Six Geese-a-Laying	\$ 360.00	\$ 240.00	-33.3%	\$ 660.00	\$ 660.00	0.0%
Seven Swans-a-Swimming	\$ 4,200.00	\$ 5,600.00	33.3%	\$ 7,035.00	\$ 7,035.00	0.0%
Eight Maids-a-Milking	\$ 46.80	\$ 52.40	12.0%	\$ 310.08	\$ 310.08	0.0%
Nine Ladies Dancing	\$ 4,759.19	\$ 4,759.19	0.0%	\$ 7,106.00	\$ 7,237.00	1.8%
10 Lords-a-Leaping	\$ 4,285.06	\$ 4,413.61	3.0%	\$ 11,283.23	\$ 11,629.79	3.1%
11 Pipers Piping	\$ 2,213.40	\$ 2,284.80	3.2%	\$ 1,900.00	\$ 2,100.00	10.5%
12 Drummers Drumming	\$ 2,397.85	\$ 2,475.20	3.2%	\$ 1,620.00	\$ 1,620.00	0.0%
Total Christmas Price Index	\$ 19,507.25	\$ 21,080.10	8.1%	\$ 31,249.00	\$ 31,956.62	2.3%
% change						
True cost of Christmas in song	\$ 78,100.10	\$ 86,608.51	10.9%	\$ 128,886.37	\$ 131,150.76	1.8%
% change						
"Core" index, excluding swans	\$ 15,307.25	\$ 15,480.10	1.1%	\$ 24,214.00	\$ 24,921.62	2.9%

Activity Sheet 1: Consumer Price Index

Consumer Price Index Annual Change in Price

	2001	2002	2003	2004	2005	2006	2007
Food and Beverages	2.8	3.5	2.6	3.0	2.3	2.2	3.9
Housing	2.9	2.4	2.2	3.0	4.0	3.2	3.1
Apparel	-3.2	-1.8	-2.1	-.2	-1.1	-.9	-.4
Transportation	-3.8	3.8	.3	6.5	4.8	1.6	2.1
Medical care	4.7	5.0	3.7	4.2	4.3	3.6	4.4
Recreation	1.5	1.1	1.1	.7	1.1	1.0	.5

Which industry saw the greatest percentage loss from 2001 to 2007? Show your calculations.

In which industry do you see the least negative percentage change? What might be the impact on your investments if this were the only factor impacting stock prices? Why?

ANSWER KEY

Activity Sheet 1: Consumer Price Index

Consumer Price Index Annual Change in Price

	2001	2002	2003	2004	2005	2006	2007	% Change
Food and Beverages	2.8	3.5	2.6	3.0	2.3	2.2	3.9	39.3
Housing	2.9	2.4	2.2	3.0	4.0	3.2	3.1	6.9
Apparel	-3.2	-1.8	-2.1	-.2	-1.1	-.9	-.4	-87.5
Transportation	-3.8	3.8	.3	6.5	4.8	1.6	2.1	-155
Medical care	4.7	5.0	3.7	4.2	4.3	3.6	4.4	-6.82
Recreation	1.5	1.1	1.1	.7	1.1	1.0	.5	-66.67

Which industry saw the greatest percentage loss from 2001 to 2007? Show your calculations.

To figure out the greatest percentage change subtract the 2001 price change from the 2007 price change and divide the difference by the 2001 price change. Multiply the quotient by 100.

For example, the percent change for Food and Beverages is found:
 $(3.9 - 2.8) / 2.8 = 1.1 / 2.8 = 0.393 \times 100 = 39.3\%$

Transportation saw the greatest percent loss at -155.

In which industry do you see the least negative percentage change? What might be the impact on your investments if this were the only factor impacting stock prices? Why?

Medical care experienced the least negative percentage change. Answer may vary with regard to its impact on a team's portfolio. However, answers should point to the Medical Care industry being least affected by the economic factors that caused the negative percent change in other industries.

Activity Sheet 2: Comparing Two Years

Go to: <http://www.pncchristmaspriceindex.com>

Use the interactive charts to complete the tables in Part One and Part Two.

PART ONE

	1994	1995	% of change
Pear	34.99	27.50	
Dove	50.00	50.00	
Hen	15.00	15.00	
Bird	280.00	280.00	
Gold	450.00	325.00	
Geese	150.00	150.00	
Swan	7,000.00	3,500.00	
Maid	34.00	34.00	
Dance	2,606.83	2,606.83	
Leap	3,182.57	3,182.57	
Pipe	1,109.16	1,109.16	
Drum	1,201.59	1,201.59	
INDEX	15,944.20	12,481.65	

The PNC Christmas Price Index had its greatest decline in cost between 1994 and 1995. Use your completed chart to answer the questions:

Which items or services most likely account for the drop in the overall Index from 1994 to 1995? Why?

Examine the overall cost of services. What can you conclude about the impact of the cost of services in the index from 1994 to 1995? Why?

PART TWO

	1995	2008	% of change
Pear	27.50	199.99	
Dove	50.00	55.00	
Hen	15.00	30.00	
Bird	280.00	599.96	
Gold	325.00	349.95	
Geese	150.00	240.00	
Swan	3,500.00	5,600.00	
Maid	34.00	52.40	
Dance	2,606.83	4,759.19	
Leap	3,182.57	4,413.61	
Pipe	1,109.16	2,284.80	
Drum	1,201.59	2,475.20	
INDEX	12,481.65	\$ 21,080.10	

Which item or service cost the least in 1995? In 2008?

Which item or service cost the most in 1995? In 2008?

Which item or service had the largest change in price over the two years? Why?

Which item or service had the biggest increase in price over the two years? Why?



Which item or service had the largest decrease in price over the two years? Why?

The cost of which service or item had the biggest impact on the overall index in 1995? Why?

The cost of which service or item had the biggest impact on the overall index in 2008? Why?

Examine the cost of services between 1995 and 2008. What is the overall impact of services on the PNC Christmas Price Index? Why?

Compare the cost of the Maids a-Milking from 1995 to 2008. What is the impact of the increase in minimum wage (salary of the maids) on the PNC Christmas Price Index? Why?

If you are heavily invested in the service industry what does the cost of services mean for your investments? Why?

ANSWER KEY

Activity Sheet 2: Comparing Two Years

Go to: <http://www.pncchristmaspriceindex.com>

Use the interactive charts to complete the tables in Part One and Part Two.

PART ONE

To figure out the greatest percentage change subtract the 1994 price change from the 1995 price change and divide the difference by the 1994 price change. Multiply the quotient by 100.

	1994	1995	% of change
Pear	34.99	27.50	-21.41
Dove	50.00	50.00	0%
Hen	15.00	15.00	0%
Bird	280.00	280.00	0%
Gold	450.00	325.00	-27.78%
Geese	150.00	150.00	0%
Swan	7,000.00	3,500.00	-50.00%
Maid	34.00	34.00	0%
Dance	2,606.83	2,606.83	0%
Leap	3,182.57	3,182.57	0%
Pipe	1,109.16	1,109.16	0%
Drum	1,201.59	1,201.59	0%
Index	15,944.20	12,481.65	-21.72%

The PNC Christmas Price Index had its greatest decline in cost between 1994 and 1995. Use your completed chart to answer the questions:

Which items or services most likely account for the drop in the overall Index from 1994 to 1995? Why?

Pear (-21.41%), gold (-27.78%), and swan (-50%) all likely account for the drop in the overall index from 1994 to 1995 because of their significant drop.

Examine the overall cost of services. What can you conclude about the impact of the cost of services in the index from 1994 to 1995? Why?

You can conclude that for most items on the list the cost of service remained the same with only a change in pear, gold and swan.

PART TWO

	1995	2008	% of change
Pear	27.50	199.99	627.24
Dove	50.00	55.00	10
Hen	15.00	30.00	100
Bird	280.00	599.96	114.27
Gold	325.00	349.95	7.68
Geese	150.00	240.00	60
Swan	3,500.00	5,600.00	60
Maid	34.00	52.40	54
Dance	2,606.83	4,759.19	82.57
Leap	3,182.57	4,413.61	38.68
Pipe	1,109.16	2,284.80	105.99
Drum	1,201.59	2,475.20	105.99
Index	12,481.65	23068.10	84.82

Which item or service cost the least in 1995? In 2008?

In 1995: Hen cost the least at \$15.

In 2008: Hen also cost the least at \$30.

Which item or service cost the most in 1995? In 2008?

In 1995: Swan cost the most at \$3,500.

In 2008: Swan also cost the most at \$5,600.

Which item or service had the largest change in price over the two years?

Pear had the largest change in price over two years. It went from \$27.50 in 1995 to \$199.99 in 2008.

Which item or service had the biggest increase in price over the two years? Why?

Dance had the biggest increase in price from \$2,606.83 in 1995 to \$4,759.19 in 2008 making the price increase by \$2,152.36. Performance artists wages have increased steadily over the years and have asked higher prices for their work.

Which item or service had the largest decrease in price over the two years? Why?

None. All items increased in price. According to PNC this Christmas is the most expensive Christmas so far for True Loves.

The cost of which service or item had the biggest impact on the overall index in 1995? Why?

The cost of the swans had the biggest impact on the overall index in 1995 because it is the highest priced and causes the most change.

The cost of which service or item had the biggest impact on the overall index in 2008? Why?

The cost of dance had the biggest impact on the overall index in 2008 because it is the highest priced and causes the most change.

Examine the cost of services between 1995 and 2008? What is the overall impact of services on the PNC Christmas Price Index? Why?

Services have had a large impact on the PNC Christmas Price Index mostly because of skilled laborers getting higher wages for their work in the recent years and higher labor costs.



Compare the cost of the “maids a milking” from 1995 to 2008. What is the impact of the increase in minimum wage (salary of the maids) on the PNC Christmas Price Index? Why?

The increase in minimum wage makes the cost of “maids a milking” increase in price from 1995 to 2008 and adds to the increase of the PNC Christmas Price Index overall because of the higher numbers.

If you are heavily invested in the service industry what does the cost of services mean for your investments? Why?

It means that since the prices are rising for the workers you will have to account for the higher wages in your investments and potentially lose money or end up investing more.

Activity Sheet 3: Comparing Two Indexes

Complete the chart below to compare the PNC Christmas Price Index with the Consumer Price Index over several years.

Year	PNC Christmas Price Index % of change	Consumer Price Index % of change	Difference
2000	1.8	3.4	
2001	3.5	1.6	
2002	-7.6	2.4	
2003	16.0	1.9	
2004	2.4	3.3	
2005	6.1	3.4	
2006	3.1	2.5	
2007	3.1	4.1	

In which year is the difference between the two indexes the greatest?

In which year is the difference between the two indexes the smallest?

How well do you think the PNC Christmas Price Index and the Consumer Price Index are correlated? Why?

ANSWER KEY

Activity Sheet 3: Comparing Two Indexes

Complete the chart below to compare the PNC Christmas Price Index with the Consumer Price Index over several years.

Year	PNC Christmas Price Index % of change	Consumer Price Index % of change	Difference
2000	1.8	3.4	1.6
2001	3.5	1.6	1.9
2002	-7.6	2.4	-10
2003	16.0	1.9	14.1
2004	2.4	3.3	0.9
2005	6.1	3.4	2.7
2006	3.1	2.5	0.6
2007	3.1	4.1	1

In which year is the difference between the two indexes the greatest?

In 2003 the difference between the two indexes is the greatest.

In which year is the difference between the two indexes the smallest?

In 2006 the difference between the two indexes is the smallest.

How well do you think the PNC Christmas Price Index and the Consumer Price Index are correlated? Why?

Answers may vary.

Activity Sheet 4: Figuring Out Your Gift List

Make a list of ten gifts you would give your “true love” for an upcoming holiday or birthday. You may include goods and services. Using Table 3 in each of the monthly archived CPI Detailed Reports at the Bureau of Labor Statistics (http://www.bls.gov/cpi/cpi_dr.htm) look up the current and historical price of each gift over the past five years to complete the table:

NOTE: Use the December CPI Detailed Reports for 2007 and the years prior. Use the most recent monthly report for 2008.

Gifts	2004	2005	2006	2007	2008
Total Cost					



Please answer the following:

In what year was the Total Cost of your gift list the most expensive?

In what year was the Total Cost of your gift list the least expensive?

Which good or service on average was the most costly over 5 years?

Which good or service was on average the least costly?

From 2007 to 2008 what was the percentage of increase in the cost of the least expensive gift?

If the inflation rate from 2007 to 2008 was 8.1%, how does the increase in the cost of the most expensive gift compare to the inflation rate? Explain