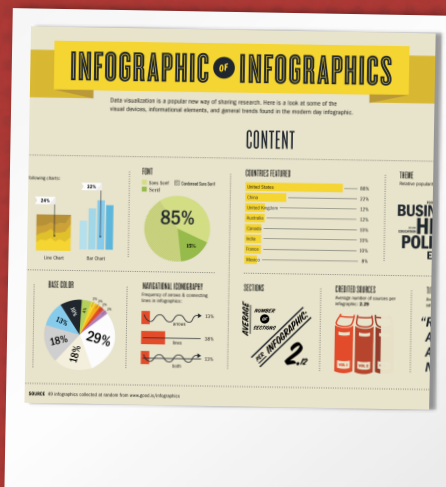


UNIT 3: INTERPRETING INFOGRAPHICS

Unit Goal: SWBAT critically evaluate a variety of graphical resources in order to defend a position on a topic.

We encounter a barrage of visual information from a variety of media sources every day. Interpreting information from these visual resources can sometimes be difficult and require the ability to break down complex images into simpler pieces. In this unit you will learn to how to interpret and create your own infographics. We will start by analyzing the physical pieces of an infographic and then we will learn about the ways that infographics communicate with us. You will then create your own infographic about the results of an experiment from the lab. Finally, you will be expected to be able to defend a position on a topic based on what you can interpret from a variety of graphical resources about that topic.

Lesson Plan 1: The Visual	Lesson Plan 2: The Content	Lesson Plan 3: The Knowledge	Lesson Plan 4: Appeal/ Comprehension /Retention	Lesson Plan 5: Create an Infographic	Lesson Plan 6: Performance Assessment
SWBAT analyze the visual characteristics of a variety of infographics. Page 2	SWBAT analyze the content of a variety of infographics. Page 9	SWBAT analyze “the knowledge” of a variety of infographics. Page 2	SWBAT evaluate the appeal, comprehension, and retention of a variety of infographics. Page 2	SWBAT create an infographic to express information from an experiment.	SWBAT critically evaluate a variety of graphical resources in order to justify a position on a topic.



LESSON PLAN 1: THE VISUAL

EXAMINE THE INFOGRAPHIC BELOW AND THEN ANSWER THE QUESTIONS THAT FOLLOW.



SOURCES

U.S. CENSUS BUREAU, GALLUP, GUINNESS BOOK OF WORLD RECORDS, NATIONAL CHRISTMAS TREE ASSOCIATION, NATIONAL RETAIL FEDERATION, SPANGLER CANDY COMPANY, NATIONAL PARK SERVICE, HALLMARK, U.S. POSTAL SERVICE, NASA, VIRGINIA TECH, TEXAS A&M, TENNESSEE CHRISTMAS TREE GROWERS ASSOCIATION, UNITED STATES NATIONAL ARBORETUM

A COLLABORATION BETWEEN HISTORY.COM AND COLUMN FIVE

LESSON PLAN 1: THE VISUAL

QUESTION SET 1

1. LIST THE FIRST THREE THINGS THAT YOU NOTICED ABOUT THE INFOGRAPHIC.

a. _____

b. _____

c. _____

2. REFLECT ON THE WORD "VISUAL." WHAT DOES THE WORD MEAN TO YOU?

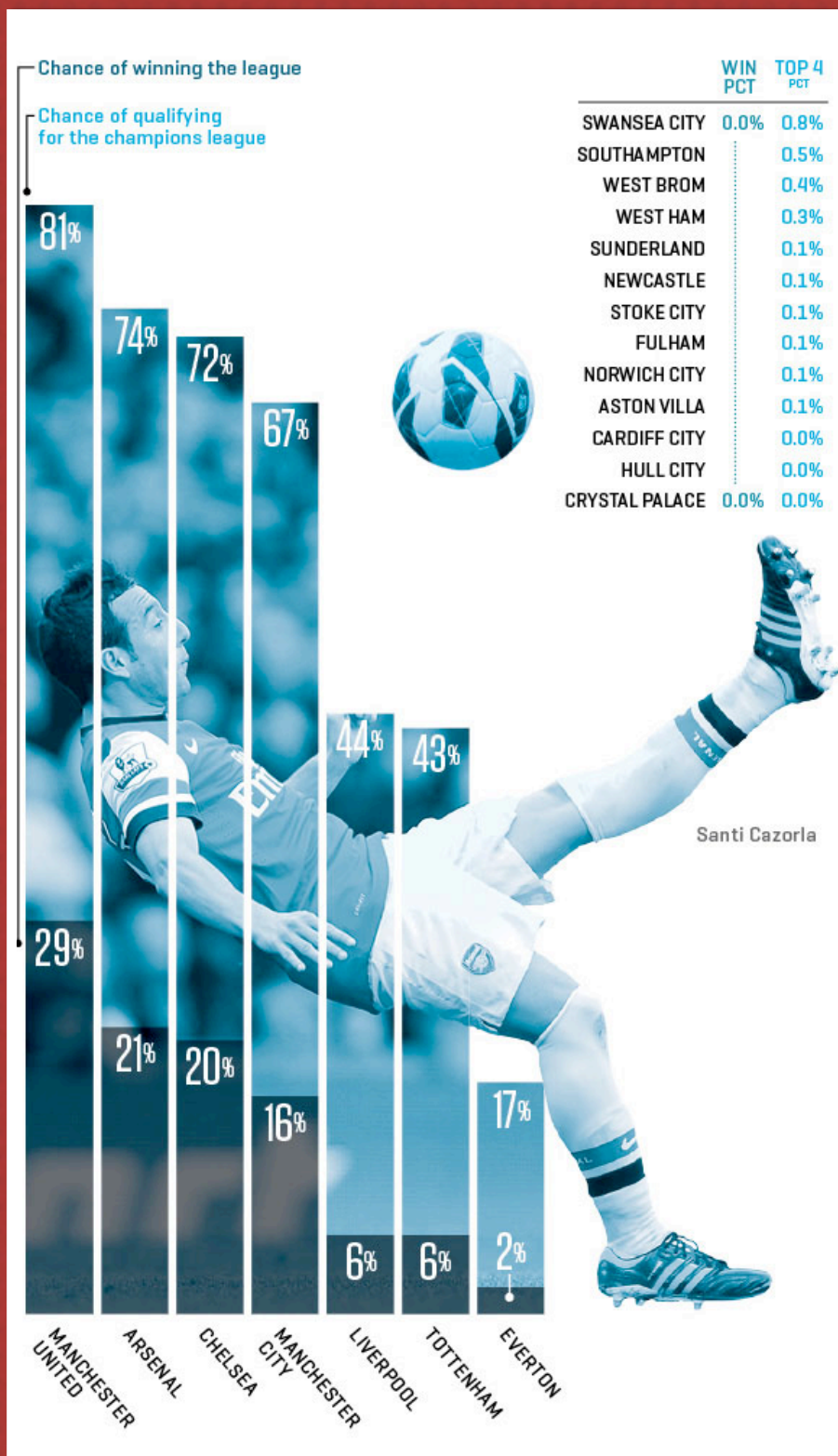
3. WERE ANY OF THE FIRST THREE THINGS YOU NOTICED ABOUT THE INFOGRAPHIC VISUAL IN NATURE? WHY OR WHY NOT?

4. HOW DO YOU THINK CHANGING THIS INFOGRAPHIC TO BE IN BLACK AND WHITE INSTEAD OF IN COLOR AFFECT ITS ABILITY TO CONVEY INFORMATION?

5. WHAT DOES THE WORD THEMATIC MEAN TO YOU? WHAT DOES THE WORD REFERENCE MEAN TO YOU?

LESSON PLAN 1: THE VISUAL

EXAMINE THE FOLLOWING INFOGRAPHIC AND ANSWER THE QUESTIONS THAT FOLLOW.



LESSON PLAN 1: THE VISUAL

QUESTION SET 2

1. LIST THE FIRST THREE THINGS THAT YOU NOTICED ABOUT THE INFOGRAPHIC.

a. _____

b. _____

c. _____

2. COMPARE AND CONTRAST THIS INFOGRAPHIC WITH THE FIRST INFOGRAPHIC. LIST THREE SIMILARITIES AND THREE DIFFERENCES BETWEEN THE TWO GRAPHICS.

3. EXPLAIN WHICH GRAPHIC YOU FOUND TO BE MORE VISUALLY APPEALING. YOU MUST JUSTIFY YOUR ANSWER WITH EVIDENCE FROM THE GRAPHICS.

4. WHAT DO YOU THINK THE THEME OF THE FIRST GRAPHIC IS? WHAT DO YOU THINK THE THEME OF THE SECOND GRAPHIC IS? HOW CAN YOU TELL?

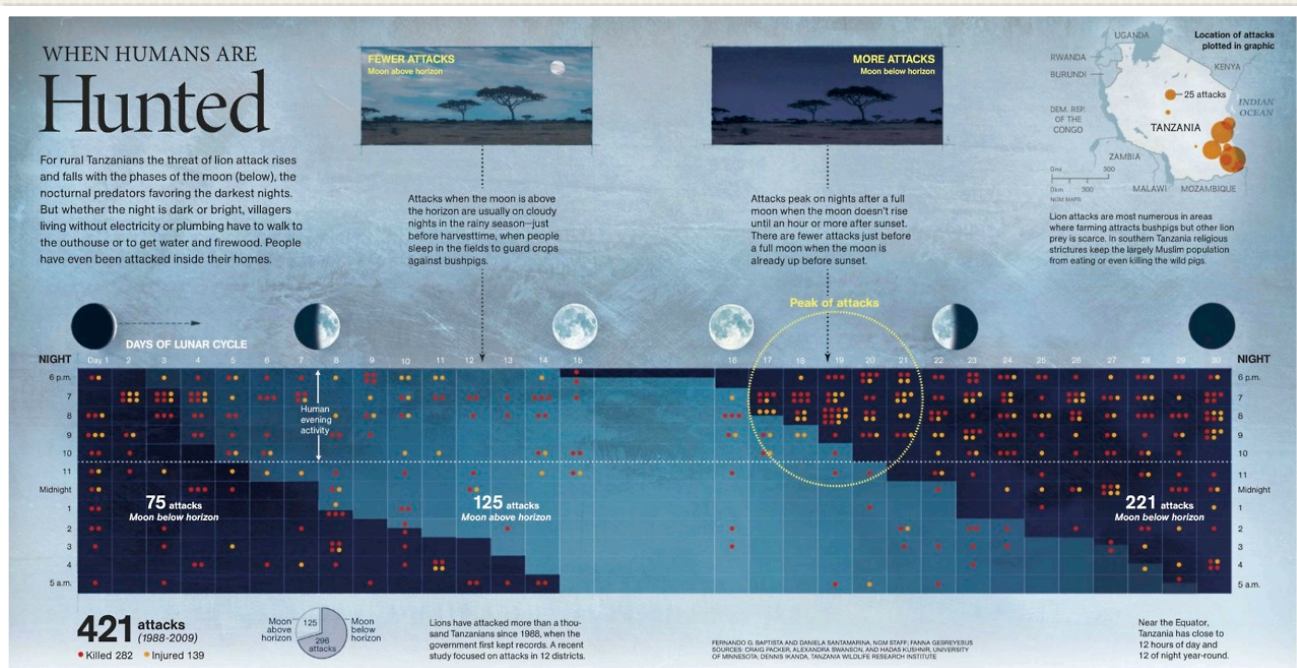
Notes I: The Visual

Infographics are graphical images whose purpose is convey complex information quickly via visual information. These can take many forms, some of which you are probably familiar with such as graphs, charts, and data tables. Infographics are found in nearly every media that we encounter in our daily lives, from the daily newspaper to social media websites to TV news to sports magazines. Being able to interpret these images is a skill that you will need for the rest of your life. More importantly, you will need to be able to use the information that you interpret from infographics to make decisions that can have a big impact upon your life and the lives of others.

Think back to what you wrote about the first things that you noticed about the two infographics presented. It is likely that most of you noticed that the graphic contained pictures and colors. This type of information is known as “the visual.” The visual of an infographic consists of the graphics themselves and the colors that are used in the image. In the salad infographic, the visual includes the maps of the United States, the circular graphs near those maps, and the various colors representing different countries. On the soccer infographic, the visual consists of the soccer player, the colors used, and the bars of the graph.

The visual is often split into two smaller categories: theme and reference. Thematic visuals are those that contribute to the overall purpose of the infographic. Thematic visuals are present in all infographics and some infographics consist entirely of thematic visuals. In the salad infographic, the maps and the colors all contribute to the theme, which has to do with produce imports in the United States. In the soccer infographic, the height of the bars, the slanting of the bars, the soccer player, and the arrangement of the teams all contribute to the theme of World Cup Soccer tournament.

The other parts of the visual are known as reference visuals. These visuals are often found in the form of icons that point to certain data, although they are not found in all infographics. In the graphic below, the circled area on the chart that says, “Peak of Attacks” would be an example of a reference graphic.



LESSON PLAN 1: THE VISUAL

QUESTION SET 3

1. ANALYZE THE VISUAL FOR THE CHRISTMAS INFOGRAPHIC. SUPPORT YOUR OPINIONS WITH EVIDENCE FROM THE INFOGRAPHIC. ATTEMPT TO ANALYZE THE GRAPHIC ON ITS OWN MERIT (THAT IS, DO NOT COMPARE IT TO OTHER GRAPHICS THAT YOU HAVE SEEN.) A THOROUGH ANALYSIS SHOULD INCLUDE AT LEAST TEN SENTENCES.
2. ANALYZE THE VISUAL FOR THE SOCCER INFOGRAPHIC. SUPPORT YOUR OPINIONS WITH EVIDENCE FROM THE INFOGRAPHIC. ATTEMPT TO ANALYZE THE GRAPHIC ON ITS OWN MERIT (THAT IS, DO NOT COMPARE IT TO OTHER GRAPHICS THAT YOU HAVE SEEN.) A THOROUGH ANALYSIS SHOULD INCLUDE AT LEAST TEN SENTENCES.

LESSON PLAN 1: THE VISUAL

3. NOW COMPARE AND CONTRAST THE CHRISTMAS INFOGRAPHIC WITH THE SOCCER INFOGRAPHIC. USING WHAT YOU NOW KNOW ABOUT THEMATIC AND REFERENCE GRAPHICS, EXPLAIN WHICH VISUALS SEEM TO CONVEY THE INFORMATION MORE READILY AND WHY.

4. WHAT DO YOU THINK THE THEME OF THE CHRISTMAS GRAPHIC IS? WHAT DO YOU THINK THE THEME OF THE SOCCER GRAPHIC IS? ARE THERE ANY REFERENCE GRAPHICS IN EITHER THE CHRISTMAS OR SOCCER INFOGRAPHICS? HOW CAN YOU TELL?

LESSON PLAN 2: THE CONTENT

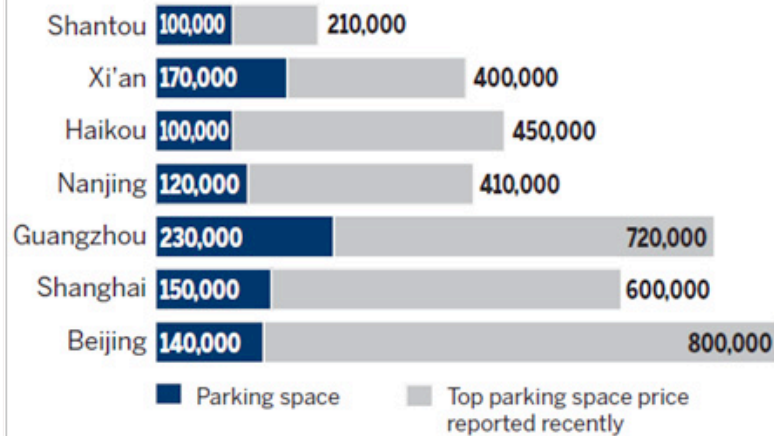
HOUSING PEOPLE — AND THEIR CARS

2010 prices (in yuan) for new homes and residential parking spaces

Housing (average per square meter)



Parking space (average total price)



Sources: Elivcity, China Real Estate Information Corp

SHEN WEI / CHINA DAILY

Question Set 4

- I. Examine the infographic above. In the space below, write down three questions that you have about the information being presented.

LESSON PLAN 2: THE CONTENT

2. Now, for each question you listed, write down a plan for how you are going to find out the answers to your questions. What specific information will you need to look for? What specialized knowledge will you need to research?

Notes 2: The Content

It is important for you to remember that infographics are a type of media message, no different from a TV news story, an advertisement, a song on the radio, or a magazine article. Media messages are constructed by someone for a purpose, and those purposes are not always what they seem at first glance. We must learn to deconstruct and critically examine these images so that we can make as much meaning out of them as possible. In this section you will learn how to ask questions about the content of an infographic.

As you probably noticed, the infographic above contains information about housing costs and parking space cost in various cities in China. In an infographic, this information is known as “the content.” The content of a infographic includes all of the actual data, including the time frame, the statistics, and the references. The time frame is information that indicates how old the data are. In the parking space graphic, this information appears to be from 2010, as indicated by the caption under the title. The statistics are all of the numbers being presented. Statistics can be enlightening, but they can just as easily be deceiving. For example, the housing information is given in terms of square meters, but the size of a parking space is not indicated. It appears, then, that people are paying a significantly higher price for a parking space than they are for living quarters, but a parking space is actually several square meters large. It would be helpful if the size of the parking space was also indicated or if the cost of living quarters was reported in such a way that the cost was equivalent to the size of one parking space so people could make better comparisons between the information.

LESSON PLAN 2: THE CONTENT

Notes 2: The Content (cont'd)

The references of an infographic help the reader determine where the data came from. On the parking space infographic, the resource information is located at the bottom of the graphic. Revisit the Christmas graphic on page 2 and the soccer graphic on page 4. Where are resources located on these graphics?

As you deconstruct an infographic, you should be asking yourself a number of questions about the information being presented so that you can attempt to identify the content of the graphic:

1. Where did these data come from?
2. Who collected these data and why?
3. How recently were these data collected?
4. If the data appear to be statistics, who analyzed the raw data and how?
5. Are the sources of data available and reliable?

Question Set 5

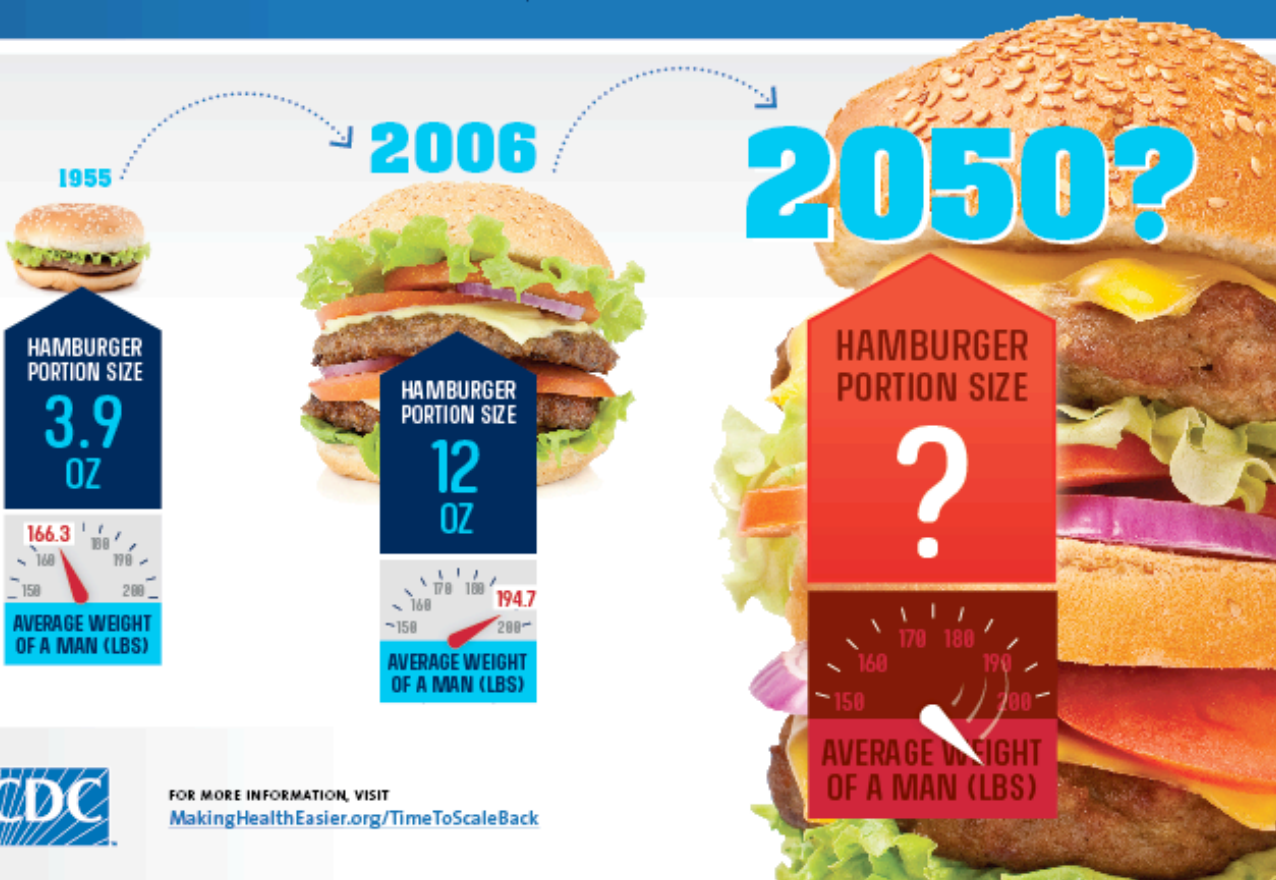
Examine the two infographics shown on the next two pages. Use the five questions from Notes 2: The Content to guide your analysis of the content of these infographics. Write a paragraph for each infographic detailing your analysis. A thorough analysis will include at least ten sentences. Before you write, you need to make a few notes about each infographic in the space below to help you organize your thoughts.

The New (Ab)Normal	Why Video Games?

LESSON PLAN 2: THE CONTENT

TIME TO SCALE BACK

Portion sizes have been growing, so have we. Burgers today are three times bigger than they were in the 1950s, and men are, on average, 28 pounds heavier. At this rate, imagine the size of a burger in 2050! But, we can work together to make healthy living easier. Scale back when eating out by ordering the smaller portion, sharing with a friend, or eating half and taking the rest with you. And, ask the restaurant manager to offer smaller-sized options.



FOR MORE INFORMATION, VISIT
MakingHealthEasier.org/TimeToScaleBack

SOURCES

Young, L., & Nestle, M. (2002). The contribution of expanding portion sizes to the US obesity epidemic. *AJPH*, 92(2), 246-49.

Young, L., & Nestle, M. (2007). Portion sizes and obesity: Responses of fast food companies. *JPHD*, 28(2), 238-48.

CDC, *Advance Data*, No. 347, Oct. 27, 2004.

CDC, *National Health Statistics Reports*, No. 10, Oct. 22, 2008.

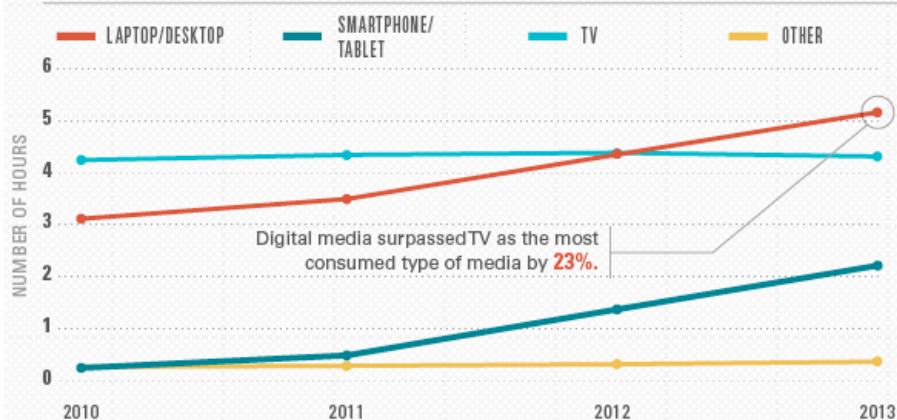
LESSON PLAN 2: THE CONTENT

SCREEN FIENDS

From the moment we wake up until we're back in bed, we are deep in our smartphones and tablets, watching TV or staring at our computers.

Have you ever wondered how much time you spend a day looking at a screen? Well, wonder no more. Here's a breakdown of the hours we spend each day glued to our devices.

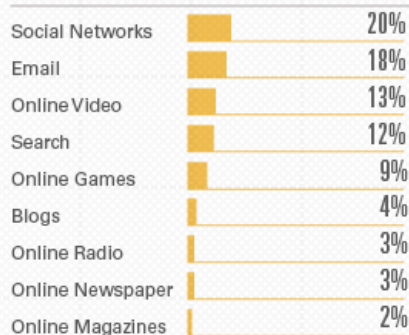
AVERAGE NUMBER OF HOURS SPENT EACH DAY PER DEVICE



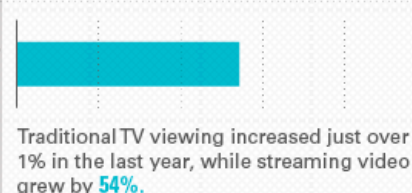
TV'S BIGGEST COMPETITOR



WHAT ARE WE DOING ONLINE?



MEDIA MILESTONE



Whether it's a TV, computer or mobile device, research shows that the average person is spending over 12 hours a day in front of a screen.

Sources: eMarketer | The Huffington Post | Marketing Pilgrim | Gartner
The Convergence | Business Standard



PGI.com

LESSON PLAN 3: THE KNOWLEDGE

Question Set 6

1. Examine the infographic on the next page and answer the following questions in a few sentences:

a. What facts are present?

b. What do those facts mean to you?

c. What will you do with this information?

LESSON PLAN 3: THE KNOWLEDGE

A **MAJOR** Investment Why your **college major** matters

SO WORTH IT
BACHELOR'S DEGREE

Over a lifetime, a full-time, full-year worker with a bachelor's degree can expect to earn **84% more** than a colleague who has only a high school diploma or GED.

However...
NOT ALL
BACHELOR'S DEGREES
ARE CREATED EQUAL

The highest earning major
Petroleum Engineering
earns **314% more** than
the lowest-earning major
Counseling/Psychology

MONEY -VS- POPULARITY

The majors that make the most money are not the most popular.



*More people with Bachelor's degrees majored in Business Management than any other major.

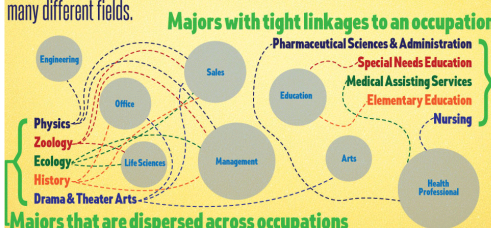
Likewise, the majors that make the least money are not the least popular.



**While Naval Architecture and Metallurgical Engineering are among the least popular, they are also among the top 10 majors with the highest earnings!

Will my **major** determine my **career**?

DEPENDS. Some majors are tied to specific occupations, while other majors are dispersed across many different fields.



Who knew **management** and **sales** professionals had such diverse backgrounds?

Source: Georgetown University Center on Education and the Workforce

created by **Schools.com**
your future starts here

Notes 3:The Knowledge

The activity that you just performed about the previous infographic is known as “the knowledge.” The knowledge is what the reader is supposed to gain from the infographic, both in terms of actual facts and in terms of what the facts mean to the reader and what they will do with that information. The meaning that an individual constructs from an infographic depends on many factors, including their previous knowledge of the subject matter, how likely they are to be influenced by statistics, and what kind of stock they put into the validity of the resources. Again, it is important that you remember that all infographics are media messages. They are constructed by someone for a purpose. It is up to you to be able to discern if that purpose is valid and meaningful for you.

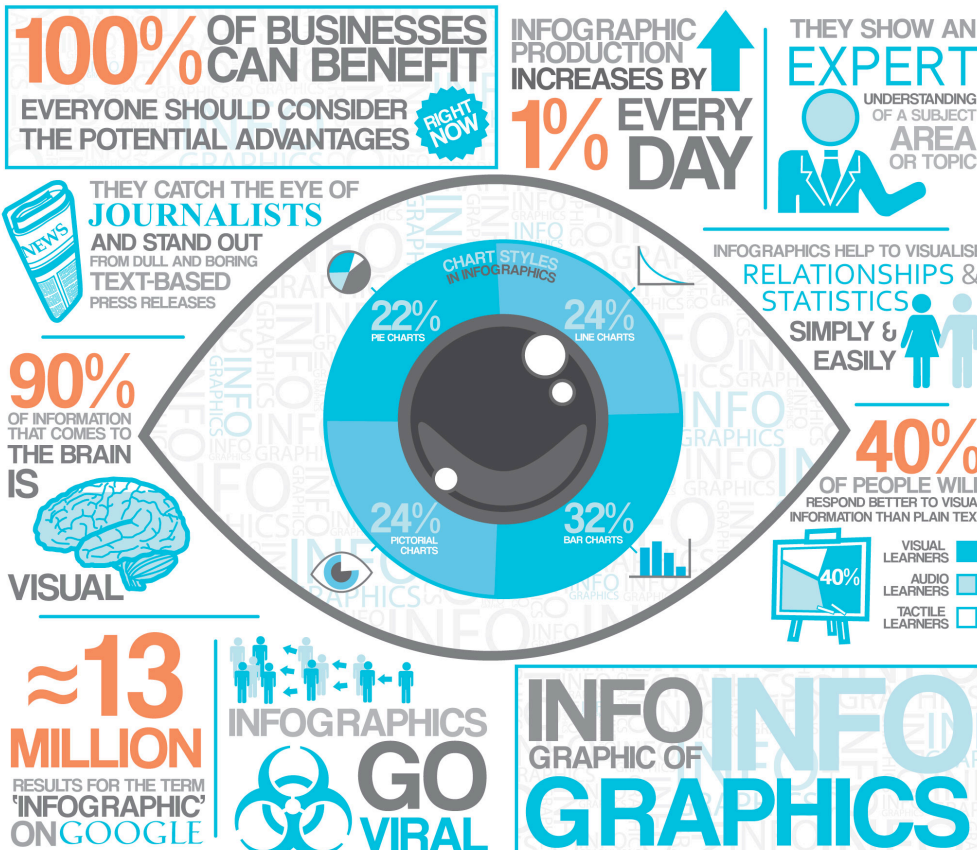
Practice analyzing the knowledge in some of the previous infographics presented in this unit. Pick two of them and use the following questions to guide your analysis of the knowledge. Write a paragraph about each one, detailing your analysis. Use the table below to make a few notes before you start writing so that your thoughts will be better organized.

1. What is the purpose of this infographic?
2. What facts are presented in this infographic?
3. What do these facts mean to me?
4. What will I do with this information?

Infographic 1	Infographic 2

MID-UNIT ASSESSMENT

WATCH THIS SPACE. INFOGRAPHICS ARE **IN**



SOURCES FOR DATA: AROUND 13 MILLION RESULTS FOR THE TERM 'INFOGRAPHIC' ON GOOGLE AS OF 28TH JULY 2011 (<http://www.google.com/trends?q=infographic&ctab=0%geo=all%date=all%sort=0>). 40% OF PEOPLE WILL RESPOND BETTER TO VISUAL FORMS OF LEARNING ACCORDING TO (Teaching Students to Read Through Their Individual Learning Styles, Marie Carbo, Rita Dunn, and Kenneth Dunn; Prentice Hall, 1986, p.13.) CHART STYLES IN INFOGRAPHICS ACCORDING TO (<http://i.imgur.com/DNxxvj.png>). INFOGRAPHIC PRODUCTION INCREASES BY 1% EVERY DAY ACCORDING TO (<http://www.bitrebels.com/geek/funkadelic-facts-about-infographics/>). 90% OF INFORMATION THAT COMES TO THE BRAIN IS VISUAL (<http://www.visualteachingalliance.com/>).

WWW.ZABISCO.COM

INFOGRAPHIC BROUGHT TO YOU BY **zabisco**

The fine print on the infographic about infographics is hard to read. It is reproduced here for your information.

“AROUND 13 MILLION RESULTS FOR THE TERM “INFOGRAPHIC” ON GOOGLE AS OF 28TH JULY 2011 (<http://www.google.com/trends?q=infographic&ctab=0%geo=all%date=all%sort=0>). 40% OF PEOPLE WILL RESPOND TO BETTER VISUAL FORMS OF LEARNING ACCORDING TO (Teaching Students to Read Through Their Individual Learning Styles, Marie Carbo, Rita Dunn, and Kenneth Dunn; Prentice Hall, 1986, p.13.) CHART STYLES IN INFOGRAPHICS ACCORDING TO (<http://i.imgur.com/DNxxvj.png>). INFOGRAPHIC PRODUCTION INCREASES BY 1% EVERYDAY ACCORDING TO (<http://www.bitrebels.com/geek/funkadelic-facts-about-infographics/>). 90% OF INFORMATION THAT COMES TO THE BRAIN IS VISUAL (<http://www.visualteachingalliance.com/>).

Mid-Unit Assessment: The Visual, The Content, The Knowledge

Your assignment is to analyze the visual, the content, and the knowledge of the infographic on the preceding page. The rubric below will be used to assess the thoroughness of your response, so it is strongly suggested that you refer to it often throughout your writing. You will also have access to the Internet during this exercise.

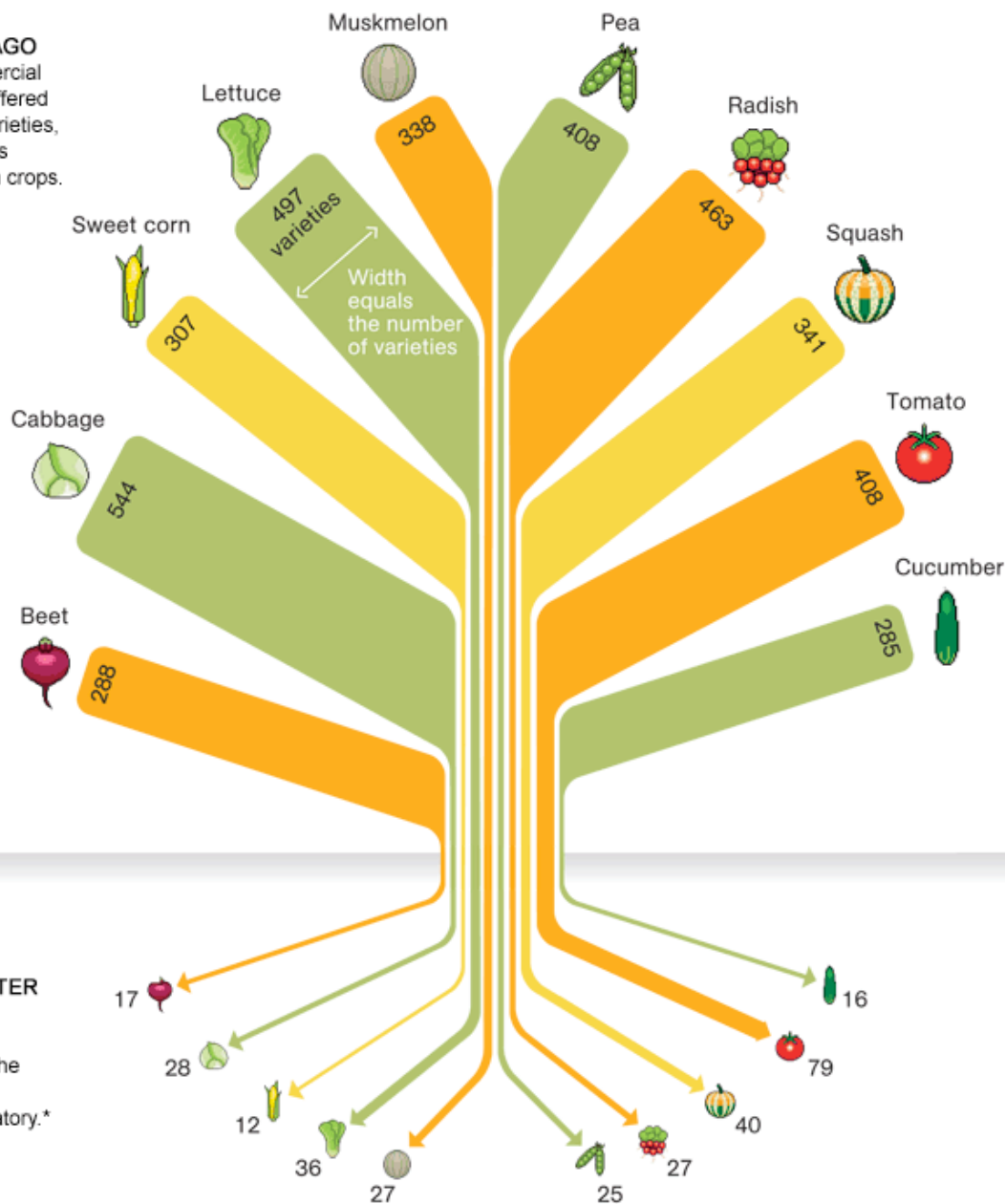
	Possibly Qualified	Qualified	Well Qualified
The Visual	Analysis addresses two or fewer aspects of the visual. Statements may or may not be supported with evidence and opinions may be stated with no reasoning to support them.	Analysis addresses at least 3 of the 4 aspects of the visual. Statements are supported with evidence and opinions are justified with reasoning.	Analysis addresses all aspects of the visual, including the colors used, the typography used, the graphics used, and the layout used. Statements are clearly supported with evidence and opinions are justified with thorough reasoning.
The Content	Analysis addresses one or fewer of the aspects of the content and/or no attempt at verifying/validating resources and statements was made. Statements may or may not be supported with evidence and opinions may be stated with no reasoning to support them.	Analysis addresses at least 2 of the 3 aspect of the content. Assessment of the validity of the resources/ statements may be limited to a few, but not all, of the resources listed. Statements are supported with evidence and opinions are justified with reasoning.	Analysis addresses all aspects of the content, including the time frame, the subject matter, and thorough assessment of validity of the resources and other statements made by the infographic. Statements are clearly supported with evidence and opinions are justified with thorough reasoning.
The Knowledge	Analysis addresses one or fewer of the topics about the knowledge. Statements may or may not be supported with evidence and opinions may be stated with no reasoning to support them.	Analysis only addresses two of three topics about the knowledge. Statements are supported with evidence and opinions are justified with reasoning.	Analysis includes clear description of what reader learned from graphic, what the information means to them, and what they will do with that information. Statements are clearly supported with evidence and opinions are justified with thorough reasoning.

LESSON PLAN 4: APPEAL/ COMPREHENSION/RETENTION

Examine the infographic below and then answer the questions that follow.

A CENTURY AGO

In 1903 commercial seed houses offered hundreds of varieties, as shown in this sampling of ten crops.



80 YEARS LATER

By 1983 few of those varieties were found in the National Seed Storage Laboratory.*

* CHANGED ITS NAME IN 2001 TO THE NATIONAL CENTER FOR GENETIC RESOURCES PRESERVATION

JOHN TOMANIO, NGM STAFF. FOOD ICONS: QUICKHONEY
SOURCE: RURAL ADVANCEMENT FOUNDATION INTERNATIONAL

1. Name some reasons that you might find infographics appealing (vs. traditional text-based information). Support your argument with evidence from this infographic.
2. How does the design of this infographic contribute to your comprehension of the information being presented? That is, compare and contrast how well you would have understood the same information presented in a text-based or numerically based format.
3. Analyze how well this infographic contributes to your retention of the information. That is, how likely are you to be able to recall this information in a few days or weeks? Why?

Notes 4: Appeal/Comprehension/Retention

The visual, the content, and the knowledge of an infographic speak to the physical creation of such a graphic. How was the graphic made? Why was the graphic made? What am I supposed to learn from the graphic? Now we are going to focus on the more communicative aspects of the infographic. For example, why use an infographic? What makes this graphic better than just text or just numbers? How does this graphic contribute to my ability to understand a difficult or complex topic? How likely am I to remember the information on this graphic compared to the same information presented in a different format?

The first part of this communication process that we will focus on is known as appeal. Why do infographics appeal to us? Many people feel like infographics are appealing because they can cover such a wide range of topics in a variety of ways. The visuals are inviting and stimulating while making numerical information seem less daunting.

In order for an infographic to be effective, the creator must take appeal into consideration. This includes thinking about things like how the colors work together, whether the subject matter is interesting, and whether or not the layout is easy to use. Too many pictures and too many numbers can get overwhelming, so the creator must think about how the infographic should be arranged to be the most visually appealing. The designer should also consider his or her intended audience. Different subjects can have very different appeal to different audiences. For example, a 40-something businessman may fall totally in love with an infographic about retirement accounts, while a teenager probably would not care. On the flip side, a teenager may find an infographic about fashion or boy bands appealing, while a middle-aged person may not.

Comprehension refers to the reader's ability to make sense of the information being presented. Good infographics allow a user to take in and make meaning out of a large amount of information in a relatively short amount of time. Furthermore, some people believe that the visual nature of infographics helps our brains make sense of what we are seeing by speeding up the processing of the information versus reading the same information in a long text-based document, for example.

Finally, infographics communicate with us visually, which for many people allows them to recall the information more readily than text-based or numerical data. People tend to be able to associate information better with a picture than they can with just text or just numbers. The ability to recall information after a certain period of time is known as retention. Many experts feel that infographics increase our retention of information by stimulating the visual part of our brains.

LESSON PLAN 5: CREATE AN INFOGRAPHIC

You are now going to demonstrate your understanding of infographics by creating your own infographic. A link to a online rubric is provided for your use. It is strongly recommended that you keep the rubric handy as you create your masterpiece. Here are the parameters for your infographic:

1. The topic of the infographic must include the data from one of the experiments that we have performed this year. You may pick any experiment that we have finished so far.
2. The infographic must be created on a computer or other technological device. One of the course objectives this year is for you to become proficient in the use of technology. This is one of the ways that you will accomplish this.
3. The infographic must be submitted to the instructor by using either Google Drive or Dropbox. Again, this is a skill you will need to learn for college. Might as well learn it now.

The rubric that we are using was developed by another teacher named Kathy Schrock. This rubric can be found on her website http://www.schrockguide.net/uploads/3/9/2/2/392267/schrock_infographic_rubric.pdf. It is recommended that you download this rubric and read through it carefully. You should make notes about parts that you do not understand and write questions about those parts to ask me in class this week. It is not okay to use, "I did not understand the rubric," as an excuse for a poor product. You have been informed of your responsibilities regarding the use of this rubric, I suggest you attend to them immediately.

You can use the following two websites to make infographics for free. Both websites require that you login with your Google credentials before you can start making things. I do not personally know how to use a lot of the functions of these resources, so if you have questions it might take me a few minutes to help you figure it out. You should probably ask a friend, access the help page on the website, or Google it if you want a faster response. It is not okay to blame my lack of expertise for a poor product. If you cannot figure out how to use the product that you have chosen, you should choose another resource that you do know how to use. If you wait until the last minute, you may end up with lots of frustration and a mediocre product. It is suggested that you explore the media aspects of this project immediately. You are not limited to these websites -- you can use any program that you are familiar with as long as it gets the job done.

<http://piktochart.com/>

<https://infogr.am/>

LESSON PLAN 6: PERFORMANCE ASSESSMENT

For the performance assessment, you will be given several infographics about a topic and a writing prompt. You will be expected to formulate a position on the topic being presented and support your position with evidence from the infographics. In a situation such as this it is important to remember that there are not “wrong” and “right” answers so much as “better” and “worse” answers. The position that you take is decided completely by you -- the grading will be based on how well you defend your position with the evidence being supplied.

As you formulate your argument, you should take into consideration the parts of the infographics that we discussed: the visual, the content, and the knowledge. You will also need to respond to how the infographic makes you feel: the appeal, the comprehension, and the retention. You can expect that some of the information will be more valid and pertinent than other information; it will be up to you to sift through the garbage and settle on the important parts. Also keep in mind when you are forming your argument that your audience will not be just me, there is a fictional audience that you will be presenting your argument to. It is up to you to figure out how to address that audience in the most meaningful way.

Happy analyzing!



Here is your prompt:

The cafeteria manager is trying to respond to criticism that the cafeteria food is “gross, too expensive, boring, too healthy, too fried, too salty, tasteless, not salty enough, too sweet, too hot, too cold, etc.” She has decided that the school should open up another line to give kids a few more choices. Use the following information to help you come up with a five-day menu that could be offered in the new line. The menu should change each day but can be repeated each week. Support your decisions with concrete evidence from the information provided.



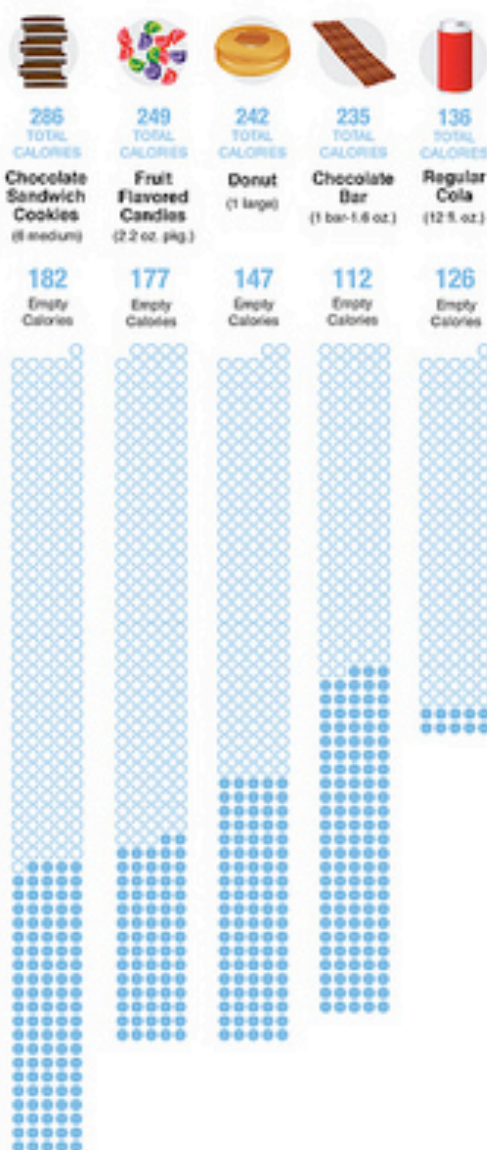
United States Department of Agriculture

SMART SNACKS IN SCHOOL

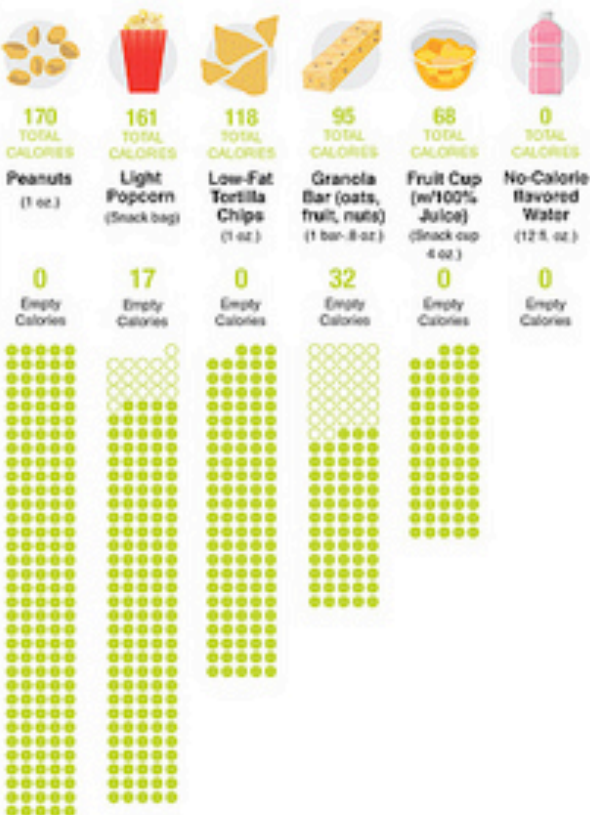
The Healthy, Hunger-Free Kids Act of 2010 requires USDA to establish nutrition standards for all foods sold in schools—beyond the federally-supported meals programs. This new rule carefully balances science-based nutrition guidelines with practical and flexible solutions to promote healthier eating on campus. The rule draws on recommendations from the Institute of Medicine, existing voluntary standards already implemented by thousands of schools around the country, and healthy food and beverage offerings already available in the marketplace.

● Equals 1 calorie ○ Shows empty calories*

Before the New Standards



After the New Standards



*Calories from food components such as added sugars and solid fats that provide little nutritional value. Empty calories are part of total calories.

USDA is an equal opportunity provider and employer.



DO STUDENTS EAT LIKE PRISONERS?

Hopefully you haven't gotten the chance to taste jailhouse cuisine, but if you're a product of the American school system, you probably have childhood memories of standing in line for grey mashed potatoes, half-thawed mystery meat, and slimy canned peaches. How do the trays measure up?

TYPICAL PRISON MEAL¹

Although prison food is not regulated by the U.S. Food and Drug Administration, most prisons serve a standardized menu that seeks to maintain a moderate level of nutrition.

AVERAGE CALORIES
SERVED TO INMATES
(PER MEAL)

1,300
1,450

AVERAGE COST TO
FEED A PRISONER
(PER DAY)

\$2.62

2009 FEDERAL
BUDGET FOR
PRISON FOOD

\$205
MILLION

NUTRALOAF BIOPOLITICS

In 2008, inmates at a Vermont prison filed a class-action lawsuit after one too many of their meals featured "neutraloaf," a mixture of whole wheat bread, non-dairy cheese, vegetables, tomato paste, powdered milk, and dry potato flakes. They argued that the food was used as punishment rather than nourishment.

TYPICAL SCHOOL CAFETERIA MEAL²

USDA-regulated lunches served at elementary schools are supposed to include all food groups, but many students are served highly processed, unhealthy meals. Under pressure from a growing movement for school-lunch reform, in 2010 Congress passed the Healthy, Hunger-Free Kids Act, which seeks to make cafeteria fare more balanced and nutritious.

3 TO 4 OUNCES
OF MEAT

ONE BEVERAGE

ONE BREAD ITEM

ONE BREAD ITEM

8 OUNCES OF MILK

AVERAGE CALORIES
SERVED TO STUDENTS
(PER MEAL)

1,400

AVERAGE COST TO
FEED A STUDENT
(PER DAY)

\$2.68

AVERAGE YEARLY
FEDERAL BUDGET
FOR SCHOOL
FOOD PROGRAMS

\$11
BILLION

Percent of school food operations that
meet the recommended standard for
saturated fat in their meals:

LESS
ONE THIRD
THAN

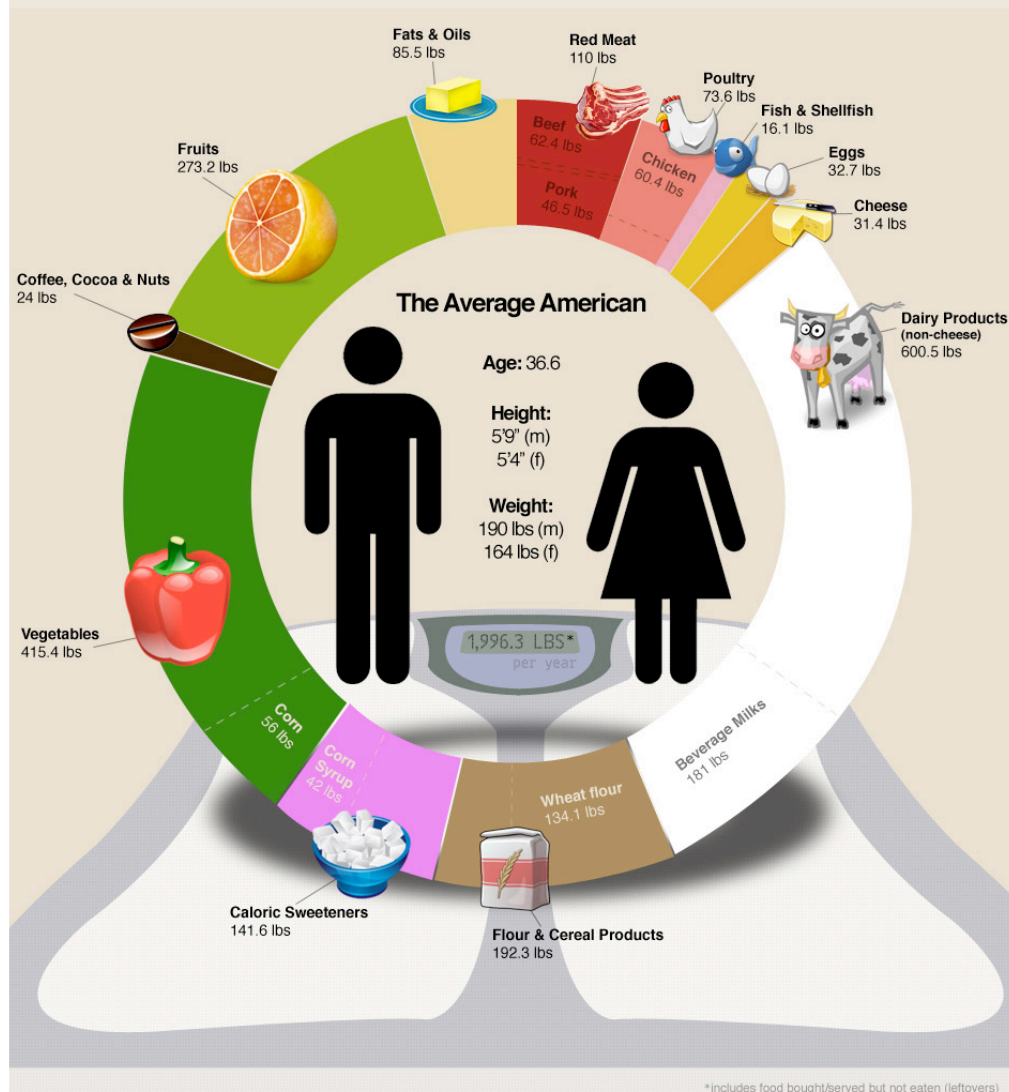
WORSE THAN FAST FOOD?

Chains such as McDonald's and Burger King
test their ground beef **five to ten times more**
often than the USDA tests beef sent to schools.

¹ A state prison sample meal, according to the Federal Bureau of Prisons. ² Elementary school sample meal, according to the Healthy, Hunger-Free Sources: Associated Content | U.S. Department of Agriculture | U.S. Department of Justice | The National School Lunch Program

WHAT ARE WE EATING?

What the Average American Consumes in a Year



That includes: (every year)

French Fries
29 lbs



Pizza
23 lbs



Ice Cream
24 lbs



Soda
53 gallons
(about a gallon/week)



Artificial Sweeteners
24 lbs



Sodium
2,736 lbs
(47% more than recommended)



Caffeine
0.2 lbs
(90,700 mg)



And 2,700 calories
a day



ve.
visualeconomics.com

SOURCES:

<http://www.fda.gov>
<http://www.usda.gov/factbook/chapter2.htm>
<http://www.cdc.gov/nchs/data/ahar/har010.pdf>
<http://www.thestar.com/business/article/780147-demand-for-spuds-drops-as-americans-eat-fewer-fries>
<http://wellness.blogs.time.com/2010/06/26/hine-out-of-10-americans-eat-too-much-salt/>
<http://www.bellaonline.com/articles/art8005.asp>
<http://www.fricanopizza.com/>
<http://www.scumdoctor.com/nutrition/junk-food/french-fries/Average-Number-Of-French-Fries-Eaten-By-Americans-Each-Year.html>
<http://www.infoplease.com/ipa/A0104742.html>
http://findarticles.com/p/articles/mi_m0813/is_3_26/ai_54271814/

EIGHT UNSAVORY ENTREES

A spate of recent E. Coli and Salmonella outbreaks have spurred the biggest food safety overhaul in seven decades. Below, some of the major outbreaks of the past four years.

Data: CDC.gov

RECENT INCIDENTS 2006-10

EGGS	1,813 CASES
JALAPENO PEPPERS	1442 CASES / 2 DEATHS
PEANUT BUTTER	714 CASES / 9 DEATHS
SPINACH	199 CASES / 3 DEATHS
TOMATOES	183 CASES
COOKIE DOUGH	72 CASES
ROMAINE LETTUCE	30 CASES
BEEF	26 CASES / 2 DEATHS

2010
ROMAINE Lettuce
iii

2010
Eggs

2006
Spinach

2009
Beef
iiii

2008
Jalapeno PEPPERS

2006
Tomatoes

2008-9
Peanut Butter

2009
Cookie Dough

9 SHOCKING FACTS ABOUT THE FOOD INDUSTRY

The U.S. grows more corn than any other country on Earth. That's a good thing, right? Well...depends on how you look at it. Modern farming techniques and massive government subsidies have turned corn into an incredibly productive — and incredibly cheap — crop. But those innocent-looking yellow ears are a big reason why the American diet has gotten worse and American waistlines have gotten larger over the past half century.



The rest is used as livestock feed or processed into common ingredients like high-fructose corn syrup, a low-cost sweetener. The result? Bad food has gotten cheaper, while healthy food has gotten more expensive.

CORN INDUSTRY AND CHEAP FOOD

33%

How far the price of soda has *gone down* over the past 30 years.

40%

How far the price of fruit has *gone up* over the past 30 years.

\$50 BILLION

How much the U.S. has pumped into the *corn* industry over the past decade.

\$1
BUYS YOU



1,200 calories of **POTATO CHIPS**



875 calories of **SODA**



250 calories of **VEGETABLES**



170 calories of **FRUIT**

TAKE ACTION

LEARN HOW TO DEMAND A BETTER FOOD SYSTEM AT TAKEPART.COM/FOOD

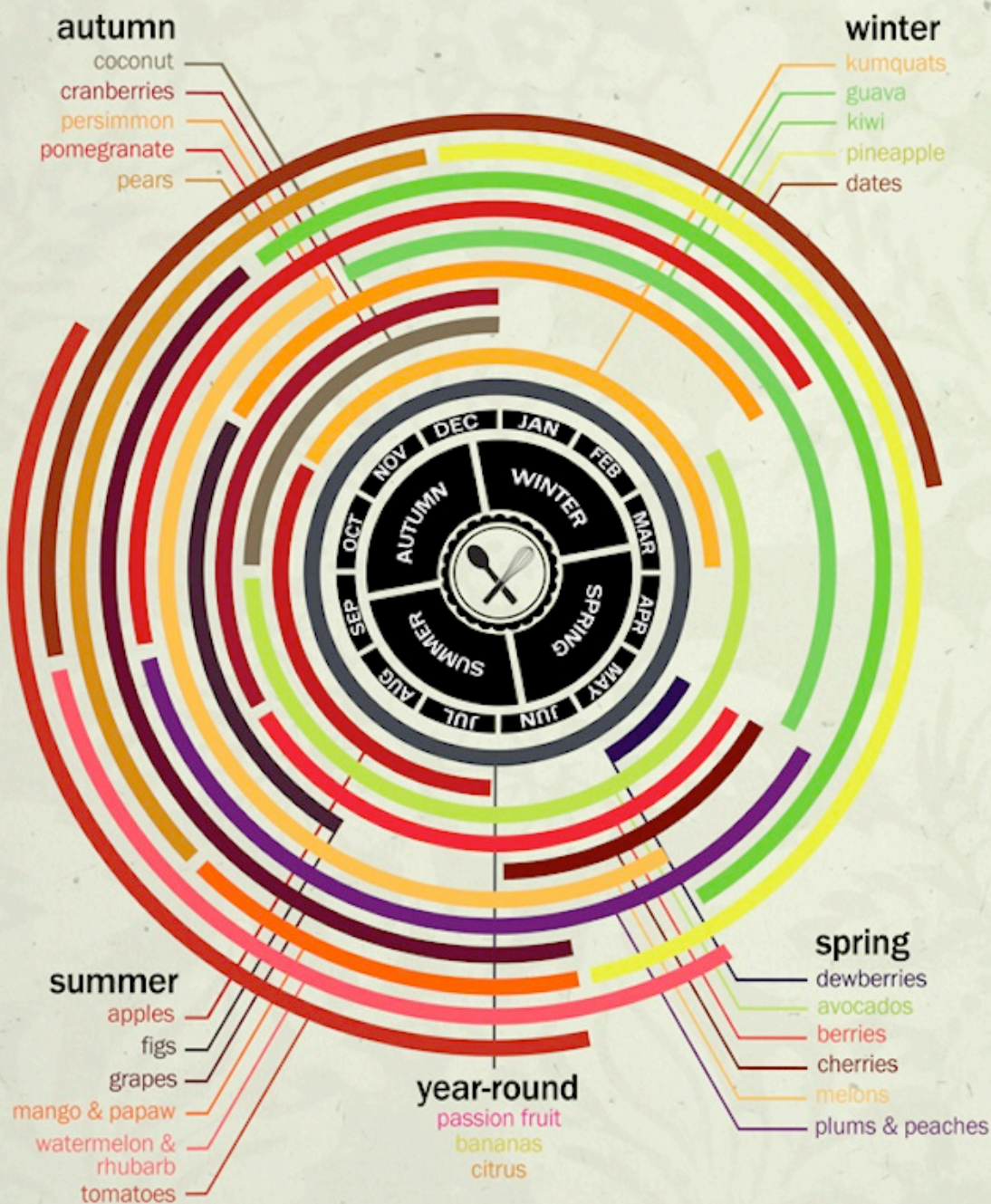
SOURCES: National Sustainable Agriculture Information Service, Time, Food Inc., Food & Water Watch, Humane Society of the United States, American Journal of Clinical Nutrition

Take Part

INFOGRAPHIC DESIGN BY COLUMN FIVE

fruits*

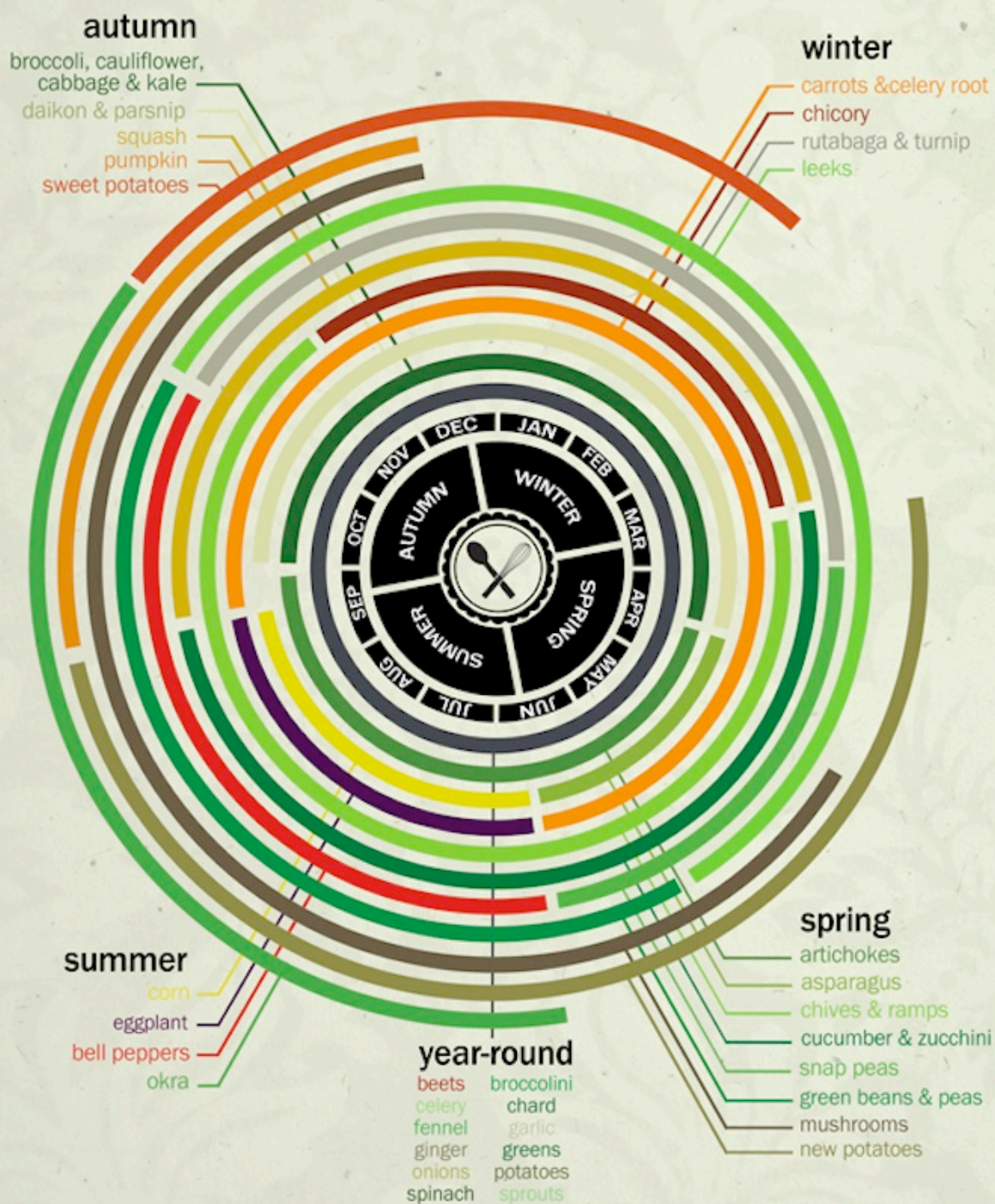
when are they in season?



* achenes, berries, drupes, hesperidia, infructescences, pepo, pomes, sweet vegetables & other things we call fruits in the kitchen.

vegetables*

when are they in season?



* berries, buds, bulbs, leaves, legumes, mushrooms, pepo, roots, sheaths, shoots, sprouts, stems, unsweet fruits & other things we call vegetables in the kitchen.

FAST FOOD: CALORIES PER DOLLAR

McDonald's

Big Mac  \$3.79 CALORIES 540 CALORIES PER DOLLAR 142	Bacon Cheese Angus Burger  \$4.29 CALORIES 820 CALORIES PER DOLLAR 191	Large Fries  \$2.19 CALORIES 500 CALORIES PER DOLLAR 228
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Burger King

Double Whopper with Cheese  \$4.79 CALORIES 990 CALORIES PER DOLLAR 207	Tendercrisp Chicken Sandwich  \$4.79 CALORIES 790 CALORIES PER DOLLAR 165	Large Fries  \$2.45 CALORIES 500 CALORIES PER DOLLAR 204
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KFC

2 Piece Breast + Wing Meal  \$5.69 CALORIES 970 CALORIES PER DOLLAR 170	10 Honey BBQ Wings  \$6.09 CALORIES 800 CALORIES PER DOLLAR 131
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Taco Bell

Beef Gordita Supreme  \$1.89 CALORIES 310 CALORIES PER DOLLAR 164	Fiesta Chicken Salad  \$4.09 CALORIES 850 CALORIES PER DOLLAR 208
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Pizza Hut

Meat Lover's Personal Pan Pizza  \$4.09 CALORIES 890 CALORIES PER DOLLAR 217
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IHOP

Country Fried Steak + Eggs  \$10.99 CALORIES 1535 CALORIES PER DOLLAR 140

Subway

6" Meatball Sub  \$3.79 CALORIES 580 CALORIES PER DOLLAR 153	12" Sweet Onion Chicken Teriyaki  \$6.39 CALORIES 770 CALORIES PER DOLLAR 121
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Food Prices Per Pound in 2012 Dollars

	1982	2012	% Change
Meats			
Bacon	\$5.20	\$4.53	 -12.9%
Chicken Legs	\$2.46	\$1.59	 -35.2%
Ground Beef	\$4.15	\$3.33	 -19.9%
Pork Chops	\$6.00	\$3.72	 -37.9%
Steak	\$7.00	\$4.90	 -30.0%
Fruits And Vegetables			
Apples	\$1.28	\$1.26	 -1.7%
Bananas	\$0.82	\$0.60	 -26.3%
Grapefruit	\$0.82	\$0.87	 +6.5%
Lettuce	\$1.13	\$0.78	 -30.9%
Peppers	\$1.95	\$2.61	 +34.0%
Tomatoes	\$1.77	\$1.39	 -21.6%
Grains And Baked Goods			
Flour	\$0.51	\$0.52	 +0.2%
Bread	\$1.27	\$1.43	 +12.2%
Other Foods			
Butter	\$4.88	\$3.18	 -34.8%
Ground Coffee	\$5.90	\$5.51	 -6.6%
Ice Cream*	\$5.21	\$5.21	≈ 0.0%
Potato Chips**	\$5.68	\$5.01	 -11.9%
Sugar	\$0.84	\$0.70	 -16.7%

*Per 1/2 Gallon

**Per 16 oz.