

This is Our Opportunity:  
Teach Thinking Skills

**21<sup>st</sup> Century Skills**

**Common Core**  
**"College and Career Readiness"**

**Life Skills**

- Thinking Skills
- Problem Solving
- Critical Thinking
- Logical Reasoning

Opportunity

Given that we are embracing major changes, this is our opportunity to insure that teaching thinking skills can (must?) be at the center of our classrooms.

Opportunity

If we do not...

COMMENTARY

**PERSONALIZATION:  
It's Anything But Personal**

McGarvey and Schwahn envision a kind of national database of worksheets and online learning activities (games, videotapes, and so on). These are education's standard products,

Customization is supposed to be all about choice. But when's the choice is mass customized learning?

**How Well?**  
The authors' argument is that... (text is small and partially obscured)



Teachers often observe that students cannot or will not engage in higher order thinking.

To what extent do you observe this?

If you do not see higher order thinking, what are some reasons for this deficiency?

Opportunity

If we do not...

*Just do it.*

*Just stop it.*

Opportunity

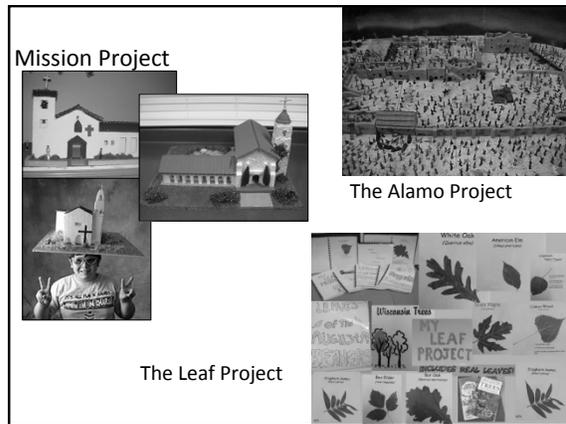
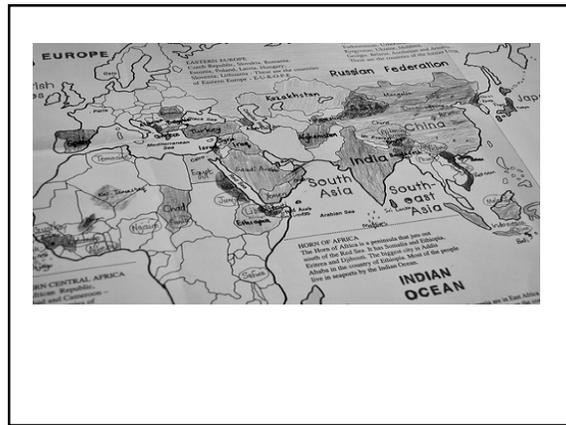
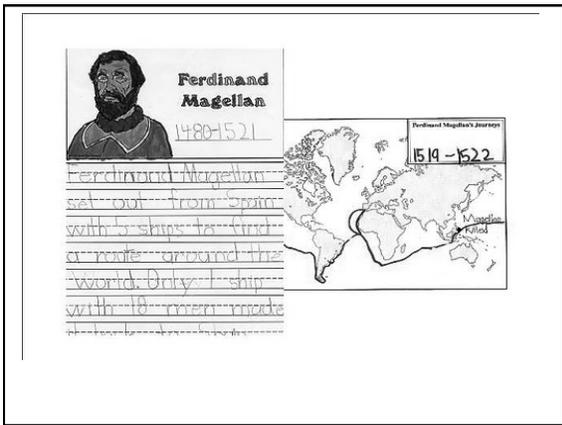
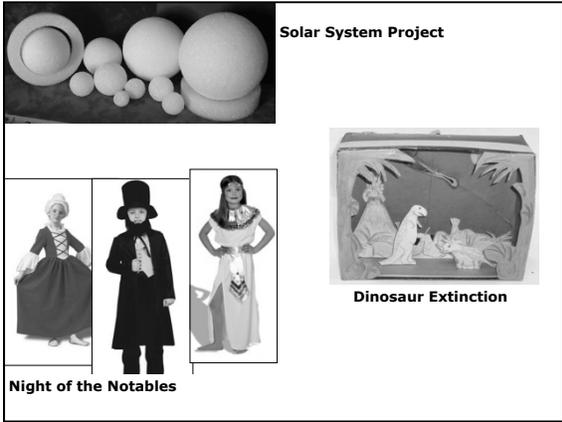
If we do this in the classroom, what would we have to stop doing?

**Mother's Blog**

...the 6 most dreaded words that can come out of my girls' mouths.

*"Mom, I have a project due."*







**A Tale of Two Cities**

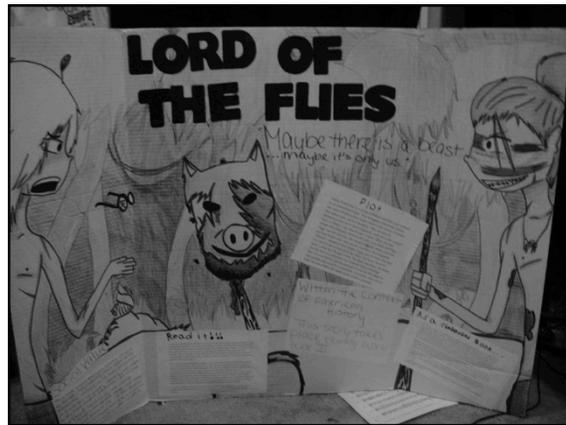
1. Create a line of greeting cards - one apology card; two love letters (75 words each), one father/daughter letter (75 words) , two sympathy cards, and one friendship letter (75 words) .  
or magazine, but the sayings in the cards MUST be YOUR OWN!!

2. Create a newspaper for the book including all of the major events that happened.  
You will need a box for the newspaper and it will have a newspaper layout. This means that when you are finished, your paper should be as large as a real newspaper. Each article should be at least 60 words in length. This project is at your discretion and you may choose the events to write about. They must be different in content, and you must have NINE ARTICLES. This project must look like a real newspaper completed with NOT just the articles alone!!

3. Build a model of the Bastille as described in the book.  
Bastille, there should be a method of execution, and there should be prisoners in the jail cells. A research paper will accompany the model and blueprint. The paper will research the bastille and must have at least 2 references with 500 words minimum in length.

4. Draw a detailed picture of a scene from the book that takes place on the streets of France at the time the book was written. This project will include a report about the French Revolution with a minimum of 500 words and 2 resources. The picture will be on at least an 8x10 piece of paper and must be drawn in color.

If you can only draw stick people, you should choose another project.



**“Life as a Pioneer” WebQuest**

Sarah, Plain and Tall  
Skylark

## Introduction

You've been reading Sarah, Plain and Tall or Skylark.

You doze off and when you wake up, Anna and Caleb are sitting next to you in a covered wagon! The three of you are hungry, bored, and want to make the time pass more quickly as Papa and Sarah drive the wagon westward.

## The Task

- Anna and Caleb are looking to you for ideas!
- Help them choose a meal that Sarah can cook with supplies you've brought along when you stop for the night.
  - Find three toys in the wagon that you can play with as the wagon continues on the journey.
  - Pick a pioneer song you can teach them to sing to pass the time together.
  - Compare your life today with life as a pioneer.

## Step 1

- Help them find a meal they want Sarah to cook tonight.
- Click on Pioneer Recipes to get ideas about the type of food they ate.
- Make a recipe card for Sarah to use listing ingredients, quantities, and directions for cooking it over an open fire.
- Save the Recipe Card to your number.

## Step 2

- Go to the back of the covered wagon and choose three toys that you, Anna, and Caleb can play with as you're traveling!
- Click on Pioneer Toys to see the types of toys that may be in the back of the wagon.
- Label the toys you've chosen. Please explain your reasons for selecting those toys!
- Save the organizer to your number.

## Step 3

- Choose a song you'd like to teach Caleb and Anna.
- Visit each of these sites, choose your favorite song for Caleb and Anna.

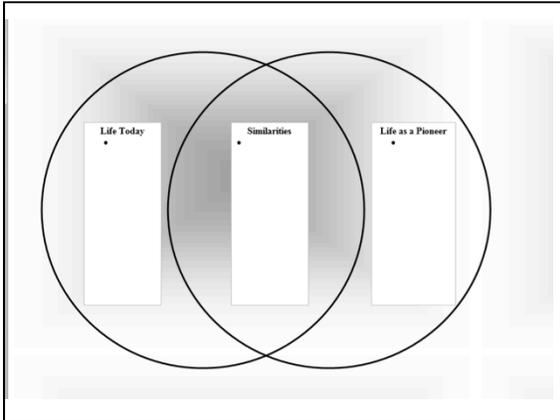
Home on the Range

Oh My Darling Clementine

Oh Susannah

## Step 4

- Click on the 3 organizers to complete each one and save them to your number.
- Pioneer Toys
- Recipe Card for Sarah
- Pioneer Comparison – you will compare your life today with pioneer life



### You're Finished!

- Now that you've written a recipe card, chosen the toys you'll play with, compared life today and in pioneer times, and chosen a pioneer song for your band

It's digital!  
It's got variety!  
It asks for thinking!

- So, what's wrong?

### Civil Rights Project

**Write an original, powerful, passionate, convincing 1-2 page speech** from your character's perspective. This speech explains who you are, why you should be listened to, what your philosophy of gaining civil rights is, and why in light of your past and present it is the best philosophy to follow.

**This is followed by a seminar discussion** in which Garvey, Washington, and Du Bois try to convince the Harlem Renaissance leaders to join their movement for civil rights. During the simulation, all students ask probing and challenging questions to other characters, while thoughtfully and accurately responding to questions directed at their own character.

**Costume** – Your speech deliverer came to the simulation dressed in accurate costume.

**Speech Quality** – The speech was delivered confidently and smoothly. Speech was not read directly off notes, but rather the speaker glanced at them sparingly. Volume, posture, and energy were all good. Rhetorical devices were used well.

**Speech Content** – Speech accurately represented the group's perspective. Speech was dynamic, creative, engaging, and unique to the cause.

**Questions asked** - Ask questions to other groups and challenge them to think critically and react appropriately. Give others something to think about, and make it interesting. If you never ask a question, this will be a zero

**Perspective**-Always stay in character and make accurate statements that are justifiable. Say nothing, get a zero here.

### Opportunity

If we do not...

Marzano warns:

Currently we are on the verge of misusing the research on instructional strategies in the same way we misused Hunter's fine work.



**Common reaction from teachers:**

"We already use all of these strategies."

**Common reaction from administrators:**

"How can I get teachers to use these strategies?"

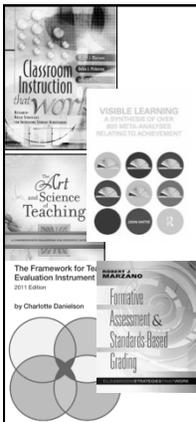


**Common reaction from teachers:**

"This too shall pass."

**Common reaction from administrators:**

"No, we are really serious this time."



**Common reaction from teachers:**

"This is George Bush's fault, isn't it?"

**Common reaction from administrators:**

"Yes."



**Common reaction from teachers:**

"You're..."

- ✓ Stifling our creativity.
- ✓ Taking our academic freedom.
- ✓ Making us all robots
- ✓ Stressing us OUT!

**Common reaction from administrators:**

"Early retirement is starting to look better and better."

Directly Teaching Thinking Skills

Directly Teaching Thinking Skills?

The Yabbits

Yeah, but thinking skills...

Directly Teaching Thinking Skills?

Yabbut, Thinking Skills

- ...aren't tested on standardized tests
- ...take too much TIME
- ...it's just one more thing

Directly Teaching Thinking Skills?

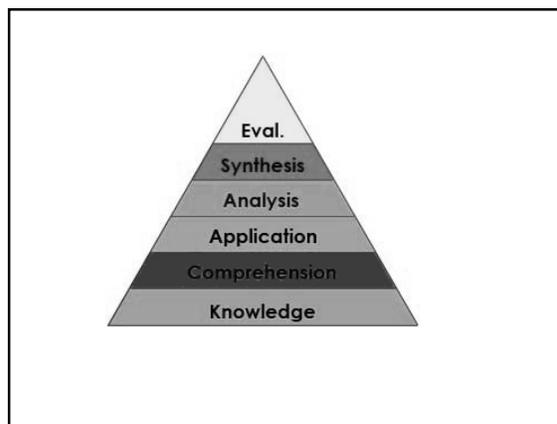
Yabbut, Thinking Skills

- ...aren't tested on standardized tests
- ...take too much TIME
- ...it's just one more thing
- ...should just be "embedded"
- ...can't be taught in isolation
- ...just means asking higher level questions

- What is an inference?
- List 10 carbohydrates.
- Who was involved in and won the Civil War?
- What is a habitat? What is a niche?
- Can you graph a quadratic equation?

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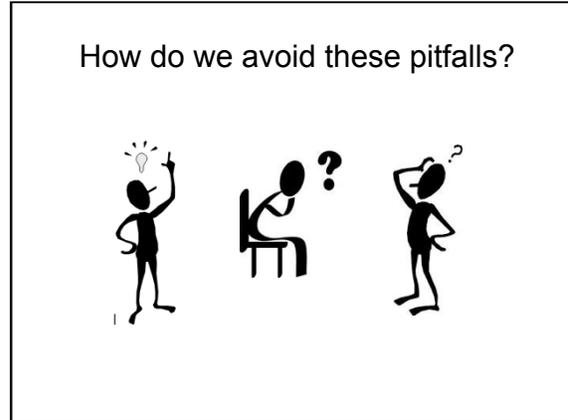
- How do readers use authors' clues to make inferences?
- Why are carbohydrates important for your body?
- What were the advantages of both the North and South during the Civil War?
- How do you distinguish between a habitat and a niche?
- How do I graph quadratic functions?



Sample Question Stems	Potential activities and products
<b>Application</b>	
Do you know another instance where...?	Construct a model to demonstrate how it will work.
Could this have happened in...?	Make a diorama to illustrate an important event.
Can you group by characteristics such as...?	Make a scrapbook about the areas of study.
What factors would you change if...?	Make a paper-mache map to include relevant information about an event.
Can you apply the method used to some experience of your own...?	Take a collection of photographs to demonstrate a particular point.
What questions would you ask of...?	Make up a puzzle game using the ideas from the study area.
From the information given, can you develop a set of instructions about...?	Make a clay model of an item in the material.
Would this information be useful if you had a ...?	Design a market strategy for your product using a known strategy as a model.
	Dress a doll in national costume.
	Paint a mural using the same materials.
	Write a textbook about... for others.

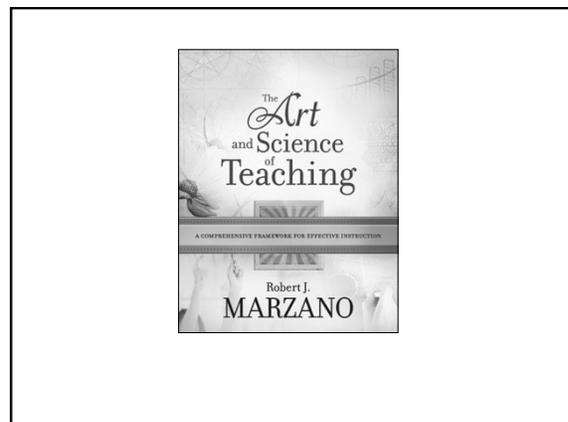
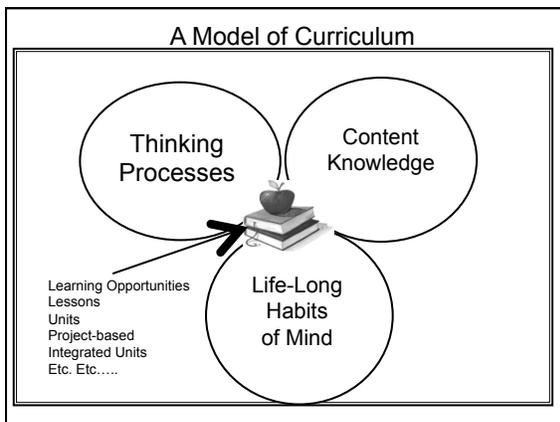
Sample Question Stems	Potential activities and products
<b>Analysis</b>	
Which events could have happened...?	Design a questionnaire to gather information. Write a commercial to sell a new product. Conduct an investigation to produce information to support a view. Make a flow chart to show the critical stages. Construct a graph to illustrate selected information. Make a jigsaw puzzle. Make a family tree showing relationships.
If ... happened, what might the ending have been?	
How was this similar to...?	
What was the underlying theme of...?	
What do you see as other possible outcomes?	
Why did ... changes occur?	
Can you compare your ... with that presented in...?	
Can you explain what must have happened when ... ?	

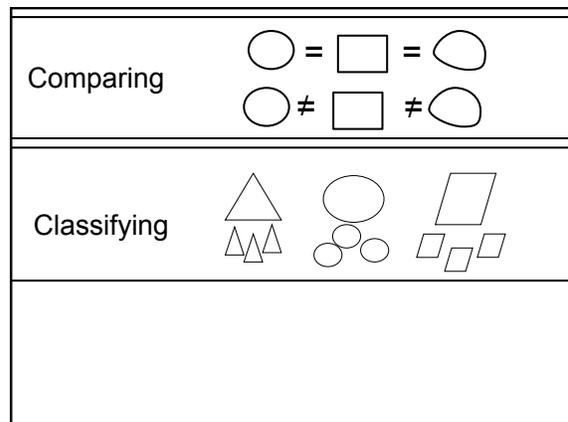
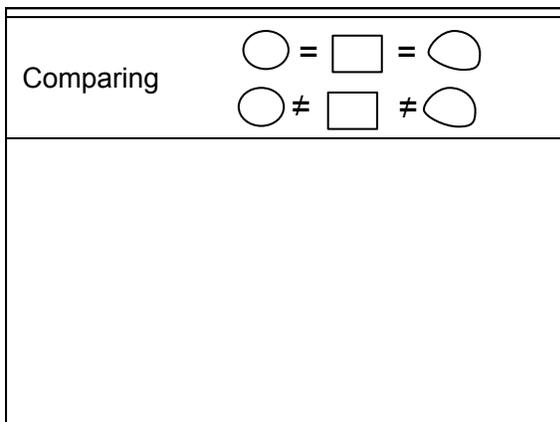
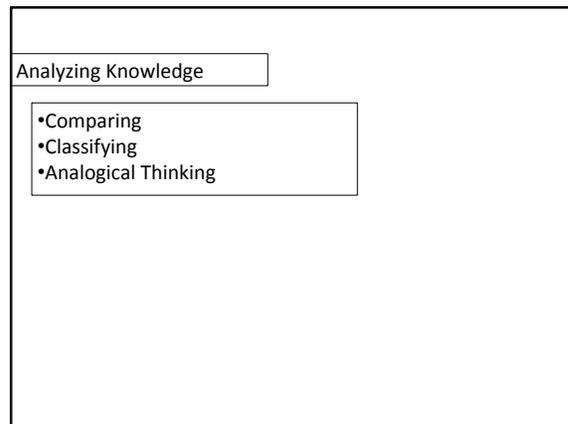
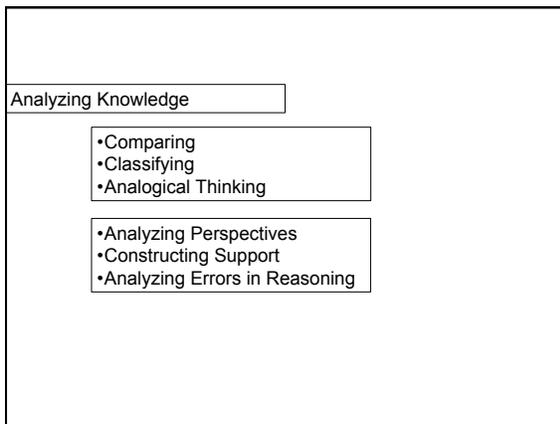
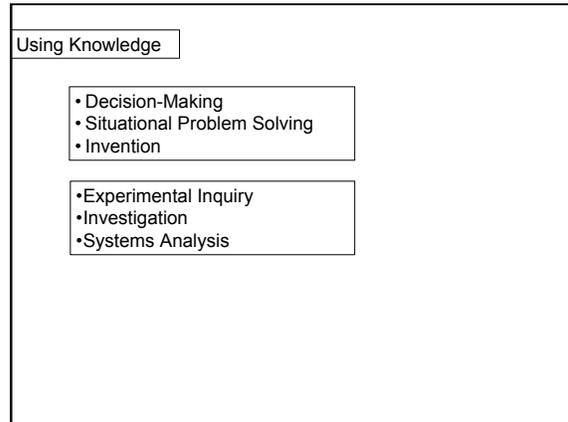
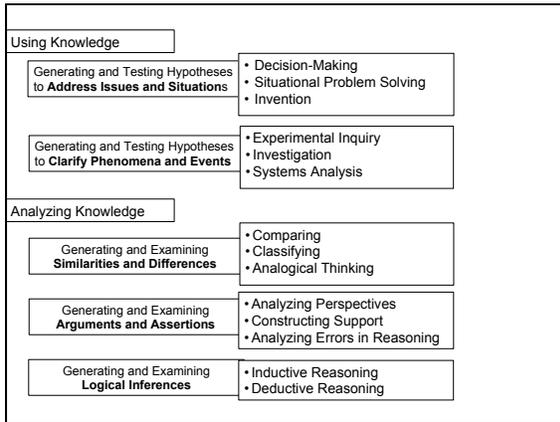
Sample Question Stems	Potential activities and products
<b>Synthesis</b>	
Can you design a ... to ...?	Invent a machine to do a specific task.
Why not compose a song about...?	Design a building to house your study.
Can you see a possible solution to...?	Create a new product. Give it a name and plan a marketing campaign.
If you had access to all resources how would you deal with...?	Write about your feelings in relation to...
Why don't you devise your own way to deal with...?	Write a TV show, play, puppet show, role play, song or pantomime about...?
What would happen if...?	Design a record, book, or magazine cover for...?
How many ways can you...?	Make up a new language code and write material using it.
Can you create new and unusual uses for...?	Sell an idea.
Can you write a new recipe for a tasty dish?	Devise a way to...
Can you develop a proposal which would...	Compose a rhythm or put new words to a known melody.



- How do we avoid these pitfalls?
1. Identify specific thinking skills for
    - ✓ District?
    - ✓ School?
    - ✓ Classroom?
  2. Make it a priority that students
    - ✓ Are encouraged/prompted to engage in these thinking skills.
    - ✓ Are taught HOW TO engage in these thinking skills

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Comparing	
Classifying	
Analogical Thinking	

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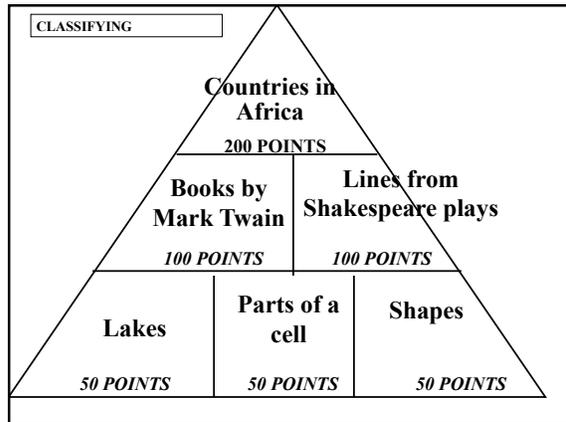
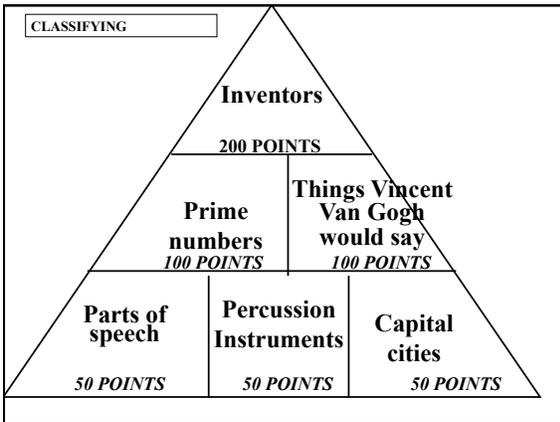
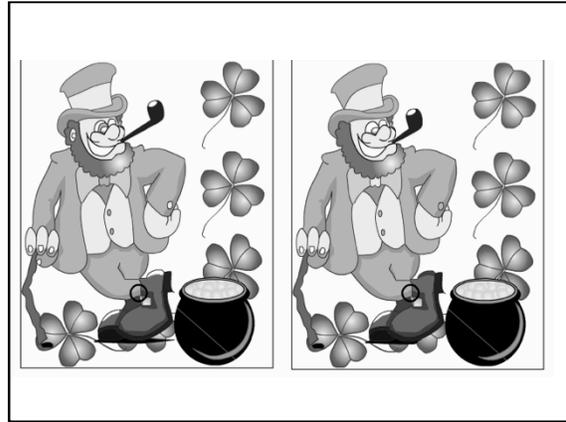
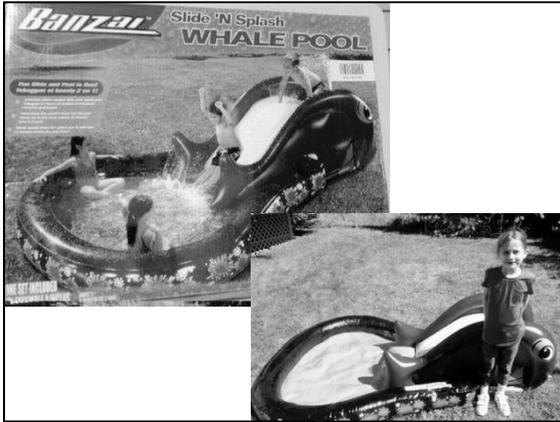
**Prompting  
the thinking**

**BURGER KING WHOPPER**

<p><b>ADVERTISEMENTS</b></p>	<p><b>ACTUAL BURGER</b></p> <ul style="list-style-type: none"> <li>- MOST ATTRACTIVE ANGLE</li> <li>- WITH CHEESE</li> <li>- SLIGHTLY FLUFFED UP</li> </ul>
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**JACK IN THE BOX TACOS**

<p><b>ADVERTISEMENTS</b></p>	<p><b>ACTUAL TACOS</b></p> <ul style="list-style-type: none"> <li>- MOST ATTRACTIVE ENDS</li> <li>- LARGEST PAIR OF 4 PURCHASES</li> </ul>
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A and B are similar because they both

\_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

A and B are different because

A is \_\_\_\_\_, but B is \_\_\_\_\_.

A is \_\_\_\_\_, but B is \_\_\_\_\_.

A is \_\_\_\_\_, but B is \_\_\_\_\_.

Fun and Enjoyment are similar because they both

\_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

Fun and Enjoyment are different because

Fun is \_\_\_\_, but Enjoyment is \_\_\_\_\_.

Fun is \_\_\_\_, but Enjoyment is \_\_\_\_\_.

Fun is \_\_\_\_, but Enjoyment is \_\_\_\_\_.

A win and a victory are similar because they both

\_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

A win and a victory are different because

Win is \_\_\_\_, but Victory is \_\_\_\_\_.

Win is \_\_\_\_,but Victory is \_\_\_\_\_.

Win is \_\_\_\_,but Victory is \_\_\_\_\_.

Fractions and Decimals are similar because they both \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

Fractions and Decimals are different because

Fractions \_\_\_\_, but Decimals \_\_\_\_.

Fractions \_\_\_\_, but Decimals \_\_\_\_.

Fractions \_\_\_\_, but Decimals \_\_\_\_.

A monarchy and a dictatorship are similar because they both \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

A monarchy and a dictatorship are different because

a monarchy \_\_\_\_, but a dictatorship \_\_\_\_.

a monarchy \_\_\_\_, but a dictatorship \_\_\_\_.

a monarchy \_\_\_\_, but a dictatorship \_\_\_\_.

Power and a authority are similar because they both \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_.

Power and authority are different because

power is \_\_\_\_,but authority is \_\_\_\_.

power is \_\_\_\_, but authority is \_\_\_\_.

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**Teaching**  
the thinking skills

Comparing	
Classifying	
Analogical Thinking	

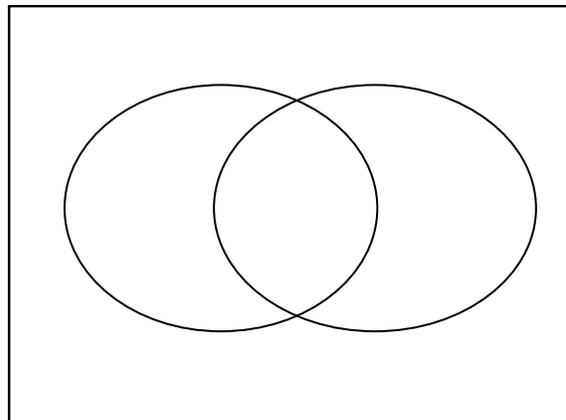
Comparing Mini-lesson
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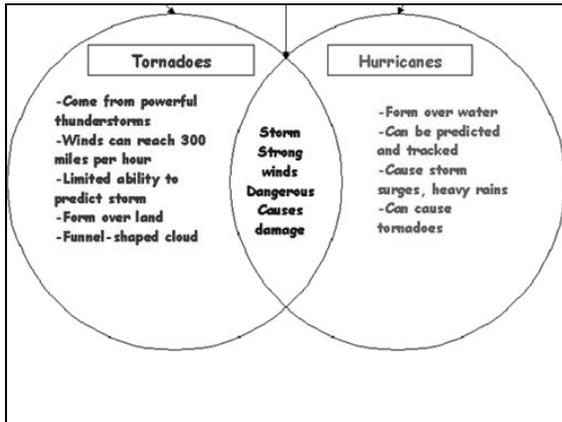
Comparing	
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Understanding Comparing.

- **Comparing** is a process of identifying similarities and differences among items. (Often called comparing and contrasting.)
- We compare every day—automatically. In the classroom, we can compare methodically.
- When you compare ideas, you can gain knowledge, insights, and new perspectives related to what is being compared.

<b>Comparing</b>
<p><b>Process Guidelines</b></p> <ul style="list-style-type: none"> <li>• Select the items you want to compare and a method of organizing your ideas, e.g., Venn, matrix, bubble graphic.</li> <li>• Identify the characteristics on which you want to base your comparison of the items.</li> <li>• Gather and record the relevant information for each characteristic for the items.</li> <li>• Identify how the items are similar and different with respect to each characteristic.</li> </ul>





Comparing	
Process Guidelines	
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	Item 1	Item 2	Item 3	
Characteristic 1				Similarities and Differences
Characteristic 2				Similarities and Differences
Characteristic 3				Similarities and Differences
Characteristic 4				Similarities and Differences

	Monarchy	Dictatorship	Democracy
How the leaders come to power			
The reaction from the people			
The role of the people			

	Monarchy	Dictatorship	Democracy
How the leaders come to power	King or queen gain throne because of heritage; sometimes a monarch takes over another country by force. Often leader for life.	Usually the dictator takes power through coercion or force. Often is leader for life.	The leaders are elected by the people; sometimes people are accused of "coercing" or forcing people to vote in for certain people. The leader does not have total power and can be voted out of office.
The reaction from the people	Through history there are examples of monarchs loved by people—but some were hated by certain groups who were persecuted.	Often in history the dictator is hated or feared by most people.	People are often split on their reactions but accept the leader if the leader was elected. They know they can try to elect someone new before too long.
The role of the people	People are generally expected to obey the rule of the monarch. Monarch holds power and can change laws. Can become like dictators	People must obey the dictator. Often there are serious consequences for not being loyal.	Generally the people are seen to have power through their votes. If they don't like what is happening, they can elect new leaders.

MAKE-OVER

*Learning Targets: Demonstrate understanding of*

- earth's atmosphere.
- the ocean.

*Culminating project*

Make a model ...  
 Label this picture of...  
 Do a report on...

MAKE-OVER

Using what we learned during these units, compare two journeys. One starts on the earth's surface and goes down deeper and deeper into the ocean. The other starts on the earth's surface and goes higher and higher into space.

In your comparison, include characteristics that reflect your understanding of the science of these two environments, but then include your own personal choice characteristics, such as emotional reactions, fear, creatures you might see etc.

Be ready to report on:

- The characteristics you selected
- The similarities and differences
- What you learned

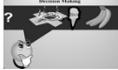
### The Task

Anna and Caleb are looking to you for ideas!

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	Item 1	Item 2	Item 3	
Characteristic 1				Similarities and Differences
Characteristic 2				Similarities and Differences
Characteristic 3				Similarities and Differences
Characteristic 4				Similarities and Differences

Decision Making	
Situational Problem Solving	
Invention	

Decision Making	
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*Time*

cover of the December issue, you want to select a  
"Person of the Decade."

Your job is to decide which person should be selected and then justify your decision to the publishers by listing the people that were considered, the criteria you used, and how each person was rated under each criterion.

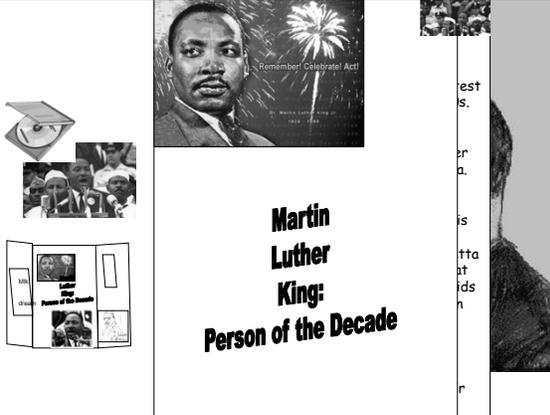
Martin Luther King, Jr.  
by student...



Martin Luther King, Jr. lost his life trying to improve the lives of African-American people. He was one of the greatest American Civil Rights leaders of the 1960s. He should be "person of the decade."

He was born in 1929 in the city of Atlanta, Georgia. His father was a minister at the Ebenezer Baptist Church in Atlanta. At fifteen Martin Luther King, Jr. was enrolled at Moorehouse College. He graduated from there in 1948, and, like his father wanted to become a minister.

Martin Luther King Jr. married Coretta Scott in 1953 while doing graduate work at Boston Graduate School. They had four kids and they were together until his death. In 1955, he completed his work at Boston Graduate School and got his PHD. By this time King was a well-known civil rights activist who was attempting to get rid of discrimination and to overthrow the unfair segregation laws in the South.



**Martin Luther King:  
Person of the Decade**

It is 1969. You are on the Board of *Time* Magazine. For the cover of the December issue, you want to select a  
"Person of the Decade."

Your job is to decide which person should be selected and then justify your decision to the publishers by listing the people that were considered, the criteria you used, and how each person was rated under each criterion.

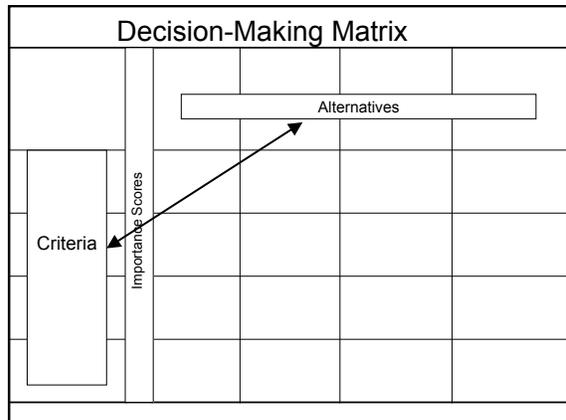
Be ready to report on:

- How you selected criteria and the importance you placed on each;
- The individuals you considered and how you determined the extent to which they met your criteria; and
- Your final selection

### Decision Making

**Process Guidelines**

- Identify a decision and the alternatives that need to be considered.
- Identify the criteria that the decision needs to meet and the relative importance of those criteria.
- Determine the extent to which each alternative possesses each criterion.
- Identify the alternative that best fits with the criteria.
- Based on your reaction to the selected alternative, determine if anything needs further consideration, e.g., new alternatives, different criteria, reconsidered matches between alternatives and criteria.



People who were in high school and college during the 1960's are now in their fifties and sixties. Consider this population. Some would say that it is interesting that there seems to be no lasting effect of the 1960's culture (the hippie factor) on these people. One possible explanation for this is that the effect is there, but it is very subtle.

Try to determine if the extent to which people were part of the 1960s culture experiences during the 1960's have had any lasting effect on these people.

Be ready to report on...

- your hypothesis and how you tested your hypothesis
- your findings
- your conclusions



**EXPERIMENTAL INQUIRY**

During the late '80's, there was a renewed interest in the Vietnam War (movies, books, documentaries). Hypothesize a possible explanation for this. Set up an experiment or other activity to test your hypothesis.

Be ready to report on...

- your hypothesis and how you tested your hypothesis
- your findings
- your conclusions



civil disobedience. Consider what would have happened if there had been no civil disobedience as part of the movement. Identify a different method of seeking change.

Be ready to describe:

- how the movement during the decade might have played out differently, and
- how the present would be different

if there had been no civil disobedience and, instead, the method of change you identify had been used exclusively.

Structured tasks for these reasoning processes

<p style="text-align: center;"><b>EXPERIMENTAL INQUIRY</b></p> <p style="font-size: small;">People who were in high school and college during the 1960's are now in their fifties and sixties. Consider this population. Some would say that it is interesting that there seems to be no lasting effect of the 1960's culture (the hippie factor) on these people. One possible explanation for this is that the effect is there, but it is very subtle. Try to determine if the extent to which people were part of the 1960s culture experiences during the 1960's have had any lasting effect on these people.</p> <p>Be ready to report on...</p> <ol style="list-style-type: none"> <li>your hypothesis and how you tested your hypothesis</li> <li>your findings</li> <li>your conclusions</li> </ol>	<p style="text-align: center;"><b>DECISION MAKING</b></p> <p style="font-size: small;">It is 1969. You are on the Board of Time Magazine. For the cover of the December issue, you want to select a "Person of the Decade." Your job is to decide which person should be selected and then justify your decision to the publishers by listing the people that were considered, the criteria you used, and how each person was rated under each criterion.</p> <p>Be ready to report on:</p> <ol style="list-style-type: none"> <li>How you selected criteria and the importance you placed on each;</li> <li>The individuals you considered and how you determine the extent which they met your criteria; and</li> <li>Your final selection</li> </ol>
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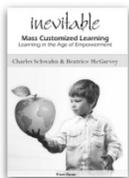
Notice:  
"Be ready to report on"

**How do we avoid these pitfalls?**

- Identify specific thinking skills for
  - ✓ District?
  - ✓ School?
  - ✓ Classroom?
- Make it a priority that students
  - ✓ Are encouraged/prompted to engage in these thinking skills.
  - ✓ Are taught HOW TO engage in these thinking skills

**Opportunity**




+


Given the changes we are embracing, this is our opportunity to insure that teaching thinking skills can (must?) be at the center of our classrooms.



- Why haven't we been able to make thinking skills the centerpiece of the classroom?
- Is this "inevitable" transformation effort really an opportunity to focus on the teaching of thinking—or would it be too much to handle?
- What must we do to avoid the implementation mistakes of the past?
- ...