

Note: This content has not been localised for SA use at this stage

Sample Project Descriptions, Questions, and Prompts

The following projects include a *Visual Ranking* Prompt, a *Seeing Reason* Research Question, and a *Showing Evidence* Prompt. This does not mean that all tools would be used in that project. Instead, these examples are provided to show how each of the online thinking tools *could* be integrated into each project.

The Arts

Learning Objectives

- Identify and assess what influences the style of artists
- Select and defend an art form
- Construct a piece of modern art that embodies a previous artistic period

Project Description

Art conveys meaning and emotion, often reflecting society. In understanding the history and style of any period of art, we have to understand the balance between the issues and developments of that particular era. Each and every period is affected by the history before it, which includes the previous philosophies, social and economic conditions, as well as the political, spiritual, and artistic influences. Create a piece of modern art that shows the influence of a previous artistic period and write an editorial on the impact of that period on a specific modern artist.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the following influences on an artist from most influential to least. OR Rank the following artists as to those who were most influential on modern art.

Seeing Reason Question:

How has the _____ artistic period influenced modern art?

Showing Evidence Prompt:

Which art form has contributed most to the current culture in this country?

Civics

Learning Objectives

- Measure the importance of volunteers to the community
- Debate the use of volunteers to provide essential services
- Persuade a targeted audience to volunteer in their local community

Project Description

There are over 65 organizations in our county that rely on volunteers to provide help to those in need. Why should we give up our free time to help others? Can one person really make a difference anyway? Determine the effects volunteering can have in your community, then create a brochure explaining the needs and benefits of volunteering in order to encourage people to volunteer locally.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the reasons for volunteering in relationship to their effects on the community.

Seeing Reason Question:

How does volunteer effort impact my community?

Showing Evidence Prompt:

Would paid workers be a better way to ensure quality staffing of non-profit organizations?

Learning Objectives

- Examine factors that affect voter turnout and rank the impact of each
- Research the impact of allowing voters to affect complex policy
- Persuade a particular section of the population to vote

Project Description

Voter turnout across the globe rose steadily between 1945 and 1990—increasing from 61% in the 1940s to 68% in the 1980s. But post-1990, the average has dipped back to 64%. Since 1945, Western Europe has maintained the highest average turnout (77%), and Latin America the lowest (53%); North America and the Caribbean have the third lowest turnout rate. Since voting is one of the cornerstones of a democracy, why is it that people don't vote? What can be done to improve voter turnout? Create a presentation and/or brochure directed to different segments of society to encourage participation in the voting process.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the following in order of those items that have the most impact on whether people vote.

Seeing Reason Question:

What affects voter turnout?

Showing Evidence Prompt:

Should voters be allowed to vote on complex policy issues?

Civics (cont.)

Learning Objectives

- Assess community needs
- Debate the possible uses of public land
- Propose a plan for a park that meets community needs and addresses safety

Project Description

As urban growth continues, the need for parks and recreation areas increases. Planning commissions must look at many different things when planning a park. They must design the park to meet the needs of the community. They must keep safety in mind and devise a set of rules for the park. You and your group must set up a proposal for the community leaders regarding the new park that will be built in your community.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the items you think are most important to be in your new community park.

Seeing Reason Question:

How should we plan a park so it is safe and fun?

Showing Evidence Prompt:

Should we use public land for golf courses which return dollars to the community?

Learning Objectives

- Identify and assess rules in society that are essential to keeping people safe
- Weigh the balance between personal rights and societal laws

Project Description

We live with rules all around us—in our homes, at school, in our community. Some rules are determined by age limit, some by association in a group. Think about all the rules that impact your life right now. How will these rules change as you get older? What rules are necessary to help a community to function well and keep everyone safe? You are part of a committee that will propose rules for a new community that is going to be created on the planet Mars. Determine the problems or dangers that can occur in a community, and then suggest the appropriate rules to help keep people safe.

Possible Question or Prompts**Visual Ranking Prompt:**

List the rules, from most important to least important, that you think are necessary to have in your community to keep people safe.

Seeing Reason Question:

How do rules help keep us safe?

Showing Evidence Prompt:

What legal activity on Earth should be banned on Mars?

Economics

Learning Objectives

- Identify and assess items necessary to a successful and safe work environment
- Propose solutions to improve substandard migratory work practices

Project Description

Migrant workers often labor for very long hours, often under hazardous conditions, living in substandard conditions, and receiving very little pay. Throughout the years, many social activists have organized protests to bring to light the migrant worker conditions. You have been assigned to a task force to examine the issue of substandard working and living conditions for migrant workers in your assigned county. You must evaluate the reasons for these conditions and put together a proposal to help bring about a better living and working environment for these workers.

Possible Question or Prompts

Visual Ranking Prompt:

List the items that are necessary for a good working environment, from most to least important.

Seeing Reason Question:

What generates migratory work and produces the current practices/conditions associated with it?

Showing Evidence Prompt:

Should employers be responsible for the living conditions of migrant workers?

Learning Objectives

- Understand how competition, demand, profit, and loss are involved in a company's decision making process
- Recommend ways to improve working conditions in various industries

Project Description

A basic tenet of our labor laws is that workers should earn a living wage in a safe, decent work environment. Many countries around the globe either do not have strict labor laws or do not enforce them. Many workers, especially in the garment industry, work long hours for little pay in substandard working conditions. Social advocate groups have raised the level of concern regarding these issues. Should we continue to buy garments and other items from companies that knowingly produce their products in "sweatshops"? How can we help to bring about positive change for these workers?

Possible Question or Prompts

Visual Ranking Prompt:

Rank the following in order of their influence on how a company runs its factories.

Seeing Reason Question:

What influences a corporation in how and where its factories are located?

Showing Evidence Prompt:

Should we continue to buy garments and other items from companies that knowingly produce their products in "sweatshops"?

Foreign Language

Learning Objectives

- Formulate, investigate and evaluate all aspects surrounding languages around the world
- Understand the differences and similarities among Francophone countries
- Examine patterns and structures to formulate generalizations

Project Description

Most people want to travel at sometime in their lives. Now it's our turn! We have all learned so much French and now we want to put it to good use! We need to figure out which Francophone region we want to visit. Through this project, you will be working as a travel agent. You have many important decisions to make so that we have a successful trip. Your job as a travel agent is to advise others on where they should travel and why. Research the ten Francophone destinations, based on your understanding of that region, as well as the goals of your client to make executive decisions on the destination. Bon Voyage!

Possible Question or Prompts

Visual Ranking Prompt:

Rank the ten Francophone countries from most to least desirable destination based on your understanding of that region and the goals of your client.

Seeing Reason Question:

Considering the diverse cultures of the Francophone countries, why do they continue to use the French language as one of their primary languages?

Showing Evidence Prompt:

Could we ever have one universal language used throughout our world?

Learning Objectives

- Identify reasons why bilingualism and/or learning a second language benefits them and society

Project Description

There are many purposes and uses of foreign languages. Some students study another language in hopes of an international or government career. Others are interested in deepening their understanding of other people and cultures. Many study a foreign language to fulfill a graduation requirement. In this project, you will explore reasons why it is important to study foreign languages and create a presentation to our School Board, sharing the results of your research. Determine what action you will request they consider, such as requesting that foreign language requirements be emphasized or increased in our school district.

Possible Question or Prompts

Visual Ranking Prompt:

Why is it good to be bilingual? Rank according to your assigned perspective.

Seeing Reason Question:

What are the outcomes of learning a second language?

Showing Evidence Prompt:

Does learning a second language increase student learning and achievement in other subject areas?

Foreign Language (cont.)

Learning Objectives

- Engage in conversations in Spanish in order to provide and obtain information, express feelings and emotions, and exchange opinions
- Understand and interpret written and spoken language in Spanish
- Understand the relationship between the practices and perspectives of the culture

Project Description

Hay muchas culturas en el mundo que hablan español. ¿Cómo son similares? ¿Cómo y por qué son diferentes? Utilice las Herramientas para el pensamiento para ayudarlo a aprender estas culturas y a practicar el español. ¡Escriba sus respuestas y comentarios en español!

[There are many cultures around the world that speak Spanish. How are they similar? What makes them different? Use the thinking tools to help you learn about these cultures and practice your Spanish. Be sure to write your answers and comments in Spanish!]

Students will use the Spanish version of the thinking tools:

<http://www97.intel.com/cr/ThinkingTools/VisualRanking>

<http://www97.intel.com/cr/ThinkingTools/SeeingReason>

<http://www97.intel.com/cr/ThinkingTools/ShowingEvidence>

Possible Question or Prompts**Visual Ranking Prompt:**

Priorice los alimentos más importantes para una típica familia española.

Defienda con explicaciones sus elecciones de cada alimento.

[Rank the foods that are most important to a traditional Spanish family. Provide reasons for each food's position.]

Seeing Reason Question:

¿Por qué es única la cultura mexicana?

[What makes the Mexican culture unique?]

Showing Evidence Prompt:

Todos estos países de habla español (México, Cuba, la República Dominicana, Puerto Rico y España) tienen culturas distintas. ¿Son más semejantes estos países a sí mismos o más semejantes a otros países cuyas lenguas vienen del latín? ¿Piensa Ud. tal vez que haya otros elementos más significantes que la lengua común? Explíquese.

[All Spanish-speaking countries (such as Mexico, Cuba, Dominican Republic, Puerto Rico, and Spain) have distinct cultures. Are their cultures more similar to each other than to other countries with a Latin-based language? Or are the other elements of culture more significant than a common language?]

Geography

Learning Objectives

- Identify and analyze population migration and growth
- Assess geographical characteristics in areas of early settlements
- Plan a new city based on geographical elements

Project Description

Alexandria, Egypt; Athens, Greece; and Shanghai, China are a few cities that were early settlements in their areas and continue to be important cities today. Of all the wide open spaces available, why did people choose to build homes and businesses in those locations? In this project, you will choose a major city with historical significance and write a report that discusses the geographical reasons as to why the city was founded in that location. You will apply that knowledge by creating a model of a new city in a location that would be most beneficial to its growth and prosperity.

Possible Question or Prompts

Visual Ranking Prompt:

Why do you think your location is best for your city? Rank the reasons for choosing this location that would be most beneficial to its growth and prosperity.

Seeing Reason Question:

What has a bearing on a city's location selection and eventual growth?

Showing Evidence Prompt:

What would be the most important factor in locating a new city in this century?

Health

Learning Objectives

- Identify and assess important safety rules
- Identify factors that affect bicycle safety
- Persuade a targeted audience to wear bicycle helmets

Project Description

In 2002, 660 people were killed in bicycle accidents across the United States. Eighty-five percent of these bicyclists reportedly weren't wearing helmets. Another alarming statistic is that bicycle deaths are highest among 14 year-old males. Many of these deaths could have easily been prevented. What can we do to keep ourselves safe when riding our bicycles? Create a presentation, drama, or storybook for students in lower grades to educate them on how to be safe when riding their bicycles.

Possible Question or Prompts

Visual Ranking Prompt:

In communicating bicycle safety, what are the most important rules to remember? Rank the following rules with the most important listed first.

Seeing Reason Question:

What factors affect bicycle safety?

Showing Evidence Prompt:

Does the safety factor of requiring helmets justify restricting a cyclist's freedom?

History

Learning Objectives

- Assess the impact of revolutions based on their population growth
- Compare and contrast the impact of the Agricultural and Industrial Revolutions
- Examine the causes and effects of the Agricultural and Industrial Revolutions

Project Description

Two of the greatest changes in the use of the earth's resources that have had a significant effect on the world population were the Agricultural and the Industrial Revolutions. The Agricultural Revolution made large-scale agricultural production possible. The Industrial Revolution, beginning in the 18th century in Europe and still happening in many parts of the world today, provided mass production of consumer goods. One of the differences between these two revolutions was its impact on population growth and distribution. Write an essay that compares and contrasts these important stages that have shaped today's world.

Possible Question or Prompts

Visual Ranking Prompt:

List the following inventions/processes that were created in the 18th century in order of their impact on population growth and distribution.

Seeing Reason Question:

What initiated the Neolithic (Agricultural) revolution and how has it influenced our world today? What initiated the Industrial Revolution and how has it influenced our world today?

Showing Evidence Prompt:

What revolution had the most impact on the people of that time period—the Agricultural Revolution or the Industrial Revolution?

Learning Objectives

- Understand the events that brought about social and political change in the 1960s and how it continues to impact us today
- Evaluate social progress

Project Description

The '60s was a decade of social and political turmoil. When looking back at this decade, we find that many of the social issues of that time are still being dealt with today, such as civil rights, women's rights, the peace movement, and others. Have we made any progress in the last 40 years? Prepare a commentary explaining how a specific social issue of today is a reflection of issues from the 1960's and how these issues have resolved, changed, or stayed the same.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the following social issues in order of their importance today.

Seeing Reason Question:

What prompted the _____ movement/issue of the 1960's and how has that movement/ issue continued to impact our lives today?

Showing Evidence Prompt:

Have we made any progress in the last 40 years?

History (cont.)

Learning Objectives

- Analyze events, literature, and philosophies that influenced the start of the American Revolution
- Present evidence and reasons logically in order to persuade an audience

Project Description

The Boston Tea Party was a dramatic event that "started" the American Revolution; but surely, there must have been more than a simple tax on tea that caused early America to start down the road to a bloody war. In teams, present a debate staged in 1773 as to whether America should break its ties with Britain.

Possible Question or Prompts**Visual Ranking Prompt:**

List the correct chronological order of events of the American Revolution.

Seeing Reason Question:

What were the factors that led America into war with Britain?

Showing Evidence Prompt:

Should the American colonies break their ties with Britain?

Learning Objectives

- Examine and assess the causes of World War II
- Identify the important events of World War II and argue their impact
- Analyze wars in modern times and generalize and appraise their justification.

Project Description

When World War I ended, an estimated 10 million were dead and 20 million wounded. The immense suffering from this war gave rise to a general revulsion to any kind of war. Many thought the need to fight a similar war would never come again. Yet a short twenty years later, World War II begins. What could possibly have happened to plunge the world into another, even more devastating, world war? How can understanding the causes of World War II help us work towards a more peaceful world?

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the most significant events of World War II that made an impact on the outcome.

Seeing Reason Question:

What were the causes of World War II? [Each group will investigate a segment of this question: economic, political, social, nationalistic, etc.]

Showing Evidence Prompt:

Are any wars justified?

Language Arts

Learning Objectives

- Analyze human nature in light of fictional literature
- Compare and analyze the roots of violence in literature with that found in history and modern day

Project Description

The incomprehensible brutality in WWII, the bombing of Japan, and the following Cold War made many people wonder about the true nature of humankind. In *Lord of the Flies*, William Golding paints a bleak representation of the world. Over fifty years later, similar atrocities continue. Are we destined to live in a world of violence? Do the characters in *Lord of the Flies* represent us?

Possible Question or Prompts**Visual Ranking Prompt:**

List the events in order of their impact on the boys' descent into savagery.

Seeing Reason Question:

What causes the breakdown of civilized behavior in *Lord of the Flies* and what are the consequences?

Showing Evidence Prompt:

Do the characters in *Lord of the Flies* represent us?

K-3
Idea**Learning Objectives**

- Analyze the impact of a character's actions on the story
- Explain how the actions of one character affect another
- Predict how character actions could alter the outcome of the story

Project Description

Characters in [book title] make decisions throughout the course of the story. These decisions can have negative, positive, or no affect on other characters in the story. Select a main character from the book and write a letter to this character describing how his/her actions affected someone else in the story.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the actions that made the most impact in the story.

Seeing Reason Question:

How does a character's words or actions impact others?

Showing Evidence Prompt:

Would the world [community, family] be different today had the character made the opposite choice?

Language Arts (cont.)

Learning Objectives

- Determine what impacts school safety
- Deliberate what effect requiring uniforms would have on a school
- Persuade an audience using well-reasoned evidence

Project Description

A safe and disciplined learning environment is the first requirement of a good school. Students who have to worry about wearing the right colors so as not to be affiliated with a gang or the latest fashion in order to fit in are not in a “safe” environment in which to learn. In response to the need for student safety, many parents, teachers, and school officials are calling for uniforms. Does requiring students to wear uniforms directly affect school environment? You are on a panel that is presenting recommendations to your local school board regarding the possibility of instituting school uniforms at your school.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the following in order of their impact on school safety.

Seeing Reason Question:

What would be the effects of requiring school uniforms?

Showing Evidence Prompt:

Should students be required to wear uniforms?

Learning Objectives

- Assess current school needs
- Analyze a school issue
- Recommend ways to address controversies

Project Description

Many problems and issues affect schools all over our country. Debates about installing computers vs. funding the arts, solving teacher shortages, allowing school prayer, dealing with school violence, ensuring equality, and providing school vouchers are just the tip of the iceberg when it comes to the issues facing today’s schools. Choose a school issue and evaluate its positive and negative aspects. You will serve on a panel of experts to suggest ways of addressing some of these controversies.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the expenditures most needed by your school, from most needed to least needed.

Seeing Reason Question:

What are the causes and effects of _____ in our schools?

Showing Evidence Prompt:

Examples: Should student athletes be required to be academically successful in order to play? OR Should we have school vouchers?

Language Arts (cont.)

K-3
Idea**Learning Objectives**

- Restate facts and details in text to clarify and organize ideas
- Read and understand grade-level-appropriate material
- Analyze text to make generalizations and recommendations

Project Description

Doctor DeSoto is a mouse who refuses to treat “dangerous” animals or animals who like to eat mice. One day, a fox shows up and begs for help because he has a tooth that is hurting him. Doctor DeSoto and his wife must figure out how to treat the fox without being eaten by the fox. Your job is to decide whether or not the DeSotos should treat the fox. You will then participate in a mock trial to figure out whether the DeSotos discriminated against the fox by refusing to treat him or whether the fox is guilty of secretly wanting to eat the DeSotos.

Possible Question or Prompts**Visual Ranking Prompt:**

From the dangerous animal list that we generated as a class, list the animals in order from least dangerous to most dangerous using your different perspectives (adult, dog, cat, baby, mice).

Seeing Reason Question:

What makes animals dangerous?

Showing Evidence Prompt:

Should Doctor DeSoto treat the fox? Would you accept cats and other dangerous animals as patients if you were Doctor DeSoto?

K-3
Idea**Learning Objectives**

- Analyze text to make generalizations and recommendations
- Read and understand grade-level-appropriate material
- Write fairytales based on given criteria

Project Description

Fairytales are a part of our lives growing up. All around the world, fairytales are used to delight and instruct children. You will be an author deciding what is important to include in your next best-selling fairytale. Use the thinking tools to help you think through the most important elements of a fairytale in order to write your own.

Possible Question or Prompts**Visual Ranking Prompt:**

What are the most important things to include in a fairytale? Rank them from the most important to the least important

Showing Evidence Prompt:

Is the number three important to have in every fairytale?

Language Arts (cont.)

Learning Objectives

- Apply safety rules to life skills
- Understand the importance and purpose of school rules

K-3
Idea**Project Description**

Students will brainstorm the importance of school rules. They will apply these school rules to their school day. They will also understand the consequences when rules are broken.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the order of importance of these school rules. Think about which ones are most important for keeping you safe. Explain why the rule helps to keep you safe.

Seeing Reason Question:

How do school rules keep me safe?

Showing Evidence Prompt:

Choose a school rule. Does this school rule really help to keep you safe?

Learning Objectives

- Use evidence from text to support an argument
- Write to defend a point of view about a character
- Use Venn Diagrams to analyze fairy tales

K-3
Idea**Project Description**

Now that we have read the traditional story of The Three Little Pigs and the wolf's version, do you believe the wolf? Why were the pigs so afraid of the wolf? Was the Wolf framed or not? You are detectives in search of the truth! You will need to find evidence from the story and then come to agreement as a group as to which opinion you will support. Using the information from both stories, you will re-write the story again as to what *really* happened—from the point of view of an unbiased narrator.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the evidence against the wolf from the strongest to the weakest.

Seeing Reason Question:

What causes the three little pigs to fear that the wolf wants to eat them?

Showing Evidence Prompt:

Was the wolf framed in the original story of The Three Little Pigs?

Mathematics

Learning Objectives

- Use linear regression to create a linear function
- Fit linear models to data
- Use the correlation coefficient and residuals to measure the “goodness of fit”
- Use regression lines and the standard error of estimate to answer questions about data

Project Description

You have been hired as a data analyst team to help various companies make marketing and business decisions based on data. In order to do this you will need to analyze the data, make predictions as to whether or not there are linear growth patterns, and make recommendations to your clients. First, using the class data of each student’s shoe size and height, plot the pair (height, shoe size) as a point on the grid. Then use the Showing Evidence Tool to evaluate whether it would be reasonable to sell shoes by a person’s height. Use the Visual Ranking Tool to help you think about the relationship between a given independent and dependent variable. You will be ranking relationships according to how linear or non-linear (exponential or quadratic) they are. You will then use your graphing calculator to check your answers. After your experience with a variety of scenarios, you will analyze what variables affected your ability to make accurate predictions from data using the Seeing Reason Tool. Using this information, you will provide recommendations to your client.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the order of the following relationships from the most linear to the least linear. Provide a brief explanation of why you think the given pair of variables is related linearly or non-linearly.

Seeing Reason Question:

What variables affect your ability to make accurate predictions from data?

Showing Evidence Prompt:

Do you think it would be reasonable to sell shoes by a person’s height?

Mathematics (cont.)

Learning Objectives

- Collect data, graph results, find line of best fit, slope and equation of the line
- Identify dependent and independent variables
- Apply understanding of slope to real-world applications

Project Description

The United States is known for its amusement parks, and the amusement parks are known for their roller coasters. But what makes these roller coasters exciting? There are many factors that could be considered, including speed, drop (including slope), force, and car type. You have been asked to give input on a roller coaster for a new theme park. Before doing so, however, you will learn how to collect data and graph results, find the line of best fit, slope, and equation of the line; and identify dependent and independent variables. [See It's a Wild Ride: A Roller Coaster Design Project (www.intel.com/education/projects/wildride) for additional lesson ideas.]

Possible Question or Prompts**Visual Ranking Prompt:**

What are the most important characteristics of a roller coaster?

Seeing Reason Question:

How do speed, drop (including slope), force, and car type influence the thrills associated with a roller coaster?

Showing Evidence Prompt:

What limitations should be placed on the development of new roller coasters to ensure safety?

Learning Objectives

- Use strategies, skills, and concepts in finding solutions
- Articulate reasons for choices for selecting problem-solving strategies
- Identify ways to improve problem-solving skills

Project Description

In this project, you will evaluate your problem-solving skills in mathematics. The final goal of this project is a Development Plan in which you will create a 4-week plan, involving a family member and peers, to improve your problem solving skills in specific ways. Your plan and results – along with recognition for accomplishing your goals—will be presented at an awards night and Open House.

Possible Question or Prompts**Visual Ranking Prompt:**

Based on your previous problem-solving experiences, rank the following strategies in order of their value to you in solving mathematics problems?

Seeing Reason Question:

What are the causes and effects of being an effective problem solver in mathematics?

Showing Evidence Prompt:

Does using different problem solving strategies increase learning and achievement in mathematics?

Mathematics (cont.)

Learning Objectives

- Itemize factors that affect one's ability to save
- Construct a savings plan
- Apply mathematical concepts to understand the growth of savings

Project Description

There are many options when it comes to money that you receive. Deciding what to do isn't always easy. Should you spend your money right away on that piece of candy, or put your money in a piggy bank to save for something you may need in the future? If you spend all your money right away, what will happen when you see something you want? Investigate further why saving is important, and then create your own personal savings plan.

Possible Question or Prompts

Visual Ranking Prompt:

Rank the factors that affect how much you can save, from the most influential to the least.

Seeing Reason Question:

What determines how much I can save?

Showing Evidence Prompt:

Should you be allowed to spend your own money as you please?

Physical Education

Learning Objectives

- Identify the factors that impact one's physical fitness
- Analyze the food sold at a school for nutritional value
- Create a personal physical fitness plan

Project Description

Obesity is a growing problem in the United States. Since 1980, the rate of obesity in adults has doubled. The number of overweight children and teens have doubled in the past two decades. In 1999–2000, an estimated 15% of children and adolescents aged 6–19 years were overweight. Obesity can lead to serious health problems. Physical inactivity, a factor in obesity, contributes to 300,000 preventable deaths per year in the United States. Should we care about being physically fit? Why should you have a personal fitness plan? Create a presentation answering these questions, plus submit a personal fitness plan to improve your overall fitness and health.

Possible Question or Prompts

Visual Ranking Prompt:

List the most persuasive arguments for encouraging someone to become physically fit, from the most to least persuasive.

Seeing Reason Question:

What factors impact your physical fitness?

Showing Evidence Prompt:

Should we be selling unhealthy foods at school?

Science: Earth Science

Learning Objectives

- Understand the relationship between humans and the environment
- Identify and weigh the damaging factors affecting seashore environments
- Persuade the public to change current practices and preserve sea life

Project Description

People, through their actions, often cause damage to seashore environments. You have been appointed to an Environmental Protection Team to teach people about ways they can protect and preserve the environments of the beach, the shallows, and the coral reef. You will create a presentation to educate and encourage the public to change their dangerous actions.

Possible Question or Prompts**Visual Ranking Prompt:**

What damages seashore environments—from the most damaging to least damaging?

Seeing Reason Question:

What are the causes and effects of damage to the seashore environments?

Learning Objectives

- Research ways to prepare for a hurricane
- Understand the causes and effects of hurricanes
- Inform others how to stay safe in a hurricane

Project Description

Hurricanes are nature's greatest storms. History tells us that lack of education and preparedness for hurricanes often spells disaster. Hurricane preparedness can be used to save lives at work, home, while on the road, or on the water. Your job as a meteorologist is to inform the public about all the issues surrounding hurricanes so that if they ever find themselves in a hurricane situation, they will know what to do.

Possible Question or Prompts**Visual Ranking Prompt:**

What are the most important ways to prepare for a hurricane? Rank the list from most important to least important.

Seeing Reason Question:

What are the causes and effects of a hurricane?

Science: Earth Science

Learning Objectives

- Rate the impact of various recycling efforts
- Analyze the costs and benefits of recycling
- Identify pollution in the community and make a plan to lessen its impact

Project Description

Many places around the world are littered and polluted. Nearly everything we do leaves behind some sort of solid waste. This can affect the water we drink, the air we breathe, and the food we eat. Individuals can alleviate the mounting trash problem by making environmentally informed decisions. As your city's new Environmental Management Director, you are responsible for a new program that encourages citizens and businesses to recycle and reduce waste. Create and present a plan for action to help lessen the pollution problem in your community.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the recycling efforts that have the most impact on the environment.

Seeing Reason Question:

What impact can recycling have on a community?

Showing Evidence Prompt:

Is recycling worth it?

Learning Objectives

- Apply understanding of the elements and interconnections of the earth's biomes in a persuasive argument
- Present correlations between rainforest destruction and negative world impact

Project Description

The earth is composed of a variety of biomes. Together these biomes create a delicate balance of give and take for the survival of this living planet. The rainforest biome has been impacted by human needs and wants. Working within a team of specialists, your task is to educate and persuade others to help save the rainforests. Within your presentation, submit solutions to the destruction of the rainforest.

Possible Question or Prompts**Visual Ranking Prompt:**

Rank the factors that contribute to rainforest devastation with those with the greatest impact listed first.

Seeing Reason Question:

How does the destruction of the rainforest impact our world?

Showing Evidence Prompt:

What is the right balance of conservation for the world's rainforests, considering the economic, political, and environmental concerns?

Science: Life Science

Learning Objectives

- Know and understand the characteristics and habitats of bats
- Compare factual information with people's misconceptions and emotional responses
- Use developmentally appropriate strategies to express original ideas

Project Description

Many people are afraid of bats because they have wrong information. You are a member of the "Friends of the Bats" club. The first thing you will need to do is try to understand why people are afraid of bats. Secondly, you will help others learn what bats are really like.

Possible Question or Prompts**Visual Ranking Prompt:**

What are the greatest benefits for having bats around? Rank them from most to least important.

Seeing Reason Question:

What increases people's fear of bats?

Showing Evidence Prompt:

Should we be afraid of bats?

K-3
Idea

Science: Physical Science

Learning Objectives

- Identify the obstacles associated with prolonged space travel and the effects of zero gravity on living things
- Propose ways to extend space travel

Project Description

Medical risks, both physical and psychological, are a significant concern for those people who are interested in traveling beyond Earth's orbit. Travel for short durations is not as big a concern as long duration missions, such as extended time in space stations or possible long distance trips to other planets. Is extended space travel realistic for human beings? What conditions would be necessary in order for humans to safely spend time in space? These are questions that need to be answered before the development of future long-term space travel. Your mission is to present a presentation along with recommendations on whether—and how—humans will be able to adapt to space travel.

Possible Question or Prompts**Visual Ranking Prompt:**

What are the biggest obstacles to prolonged space missions? Rank the list with the greatest obstacle first.

Seeing Reason Question:

What are the effects of zero gravity on the human body and other living matter?

Showing Evidence Prompt:

Should we continue to explore space?