

Atmosphere Menu

Name: _____ Lab Group: _____
Date distributed to students: _____

Class Period: _____

Date Due: Look below*

Mrs. Snyder is concerned about your nutrition, and therefore your atmospheric meal must be well balanced and healthy. **Choose one appetizer, entrée, veggie, and a beverage. Dessert and extra veggies are optional.** Point values are given, your work should be error-free, cited correctly, in your own words, and colorfully presented. Cubes will be used to select the item that you will present to your group.

Appetizers: 15 points

1. Atmospheric salad: creatively present the mixture of elements in the Earth's atmosphere. Your precipitation salad dressing should show appropriate color, and characteristics.
2. Create a graph to illustrate the percentage of gases in our atmosphere.
3. Create tasty and appealing appetizer showing the difference in organization of atoms in various states of matter.
4. Create a model of the pollinators able to survive high altitudes. **Accentuate** their special adaptations to be successful at altitudes that other pollinators cannot survive at.
5. Conduct research and write a narrative describing the challenges of high altitude activities including playing soccer, climbing mountains, hang gliding, etc. Use descriptive adjectives, creative **analogies**, clear similes, and mystifying metaphors.

Entrées: 25 points

1. Create a three-dimensional model of the layers of the atmosphere. Artistically name each, show the composition of gasses, dust, ice, and liquid water. Show temperature, and pressure variations in an appealing and appetizing way.
2. Dramatically convey the emotion, physical feelings, challenges, and concerns faced by **Felix Baumgartner** during his **free fall**. Identify where he started, and the changes he encountered. Dress in character, and present this to the class.
3. Interview those who suffer from joint pain when it rains, or the day before it is supposed to. Relate their **barometric** joints to changes in the atmosphere that precede a storm.
4. Ozone special. Clarify this layer, explain its history, and tell how humans are changing it and the peril we face as a result. Create a Prezi to share with your class compelling us to change our behavior.

Veggies! 10 points

1. Create a poster explaining what a **chlorofluorocarbon** is.
2. Where is the Jet Stream? Why is it so named?
3. Create an experiment to show that air has volume.
4. Discover how the air above an active volcano is different from that over an area without one.
5. How do we make air move? Figure this out, and develop a plan to move **stagnant** air in the classrooms at school experiencing still air (even when the windows are open.)

Beverages: 10 points

1. How does the amount of water change in the layers of the atmosphere? Create a colorful poster, digitally created power point, or graph to show this.
2. What is hail? How does it form, and under what atmospheric conditions?
3. Which type of precipitation is most similar to a slushy? Explain under what conditions it forms.

Desserts:

1. Create a pamphlet using MS word. Present the impact of high altitude, and indicate **antidotes** to this condition. Provide suggestions on how travelers can most easily accommodate to high altitude. Apply your suggestions to travel to Cusco, Peru, Pikes Peak Colorado, Mt. Everest, or the Swiss Alps.
2. Create a **web quest** to assist a third grade student to better understand the layers of the atmosphere, pressure, density, altitude, and humidity. Include images, transitions, animations, and hyperlinks to videos or animations.

Due Dates: Appetizer: September, 25; Entree: October 1; Veggie and Beverage: September 27, Extra activities: October 4