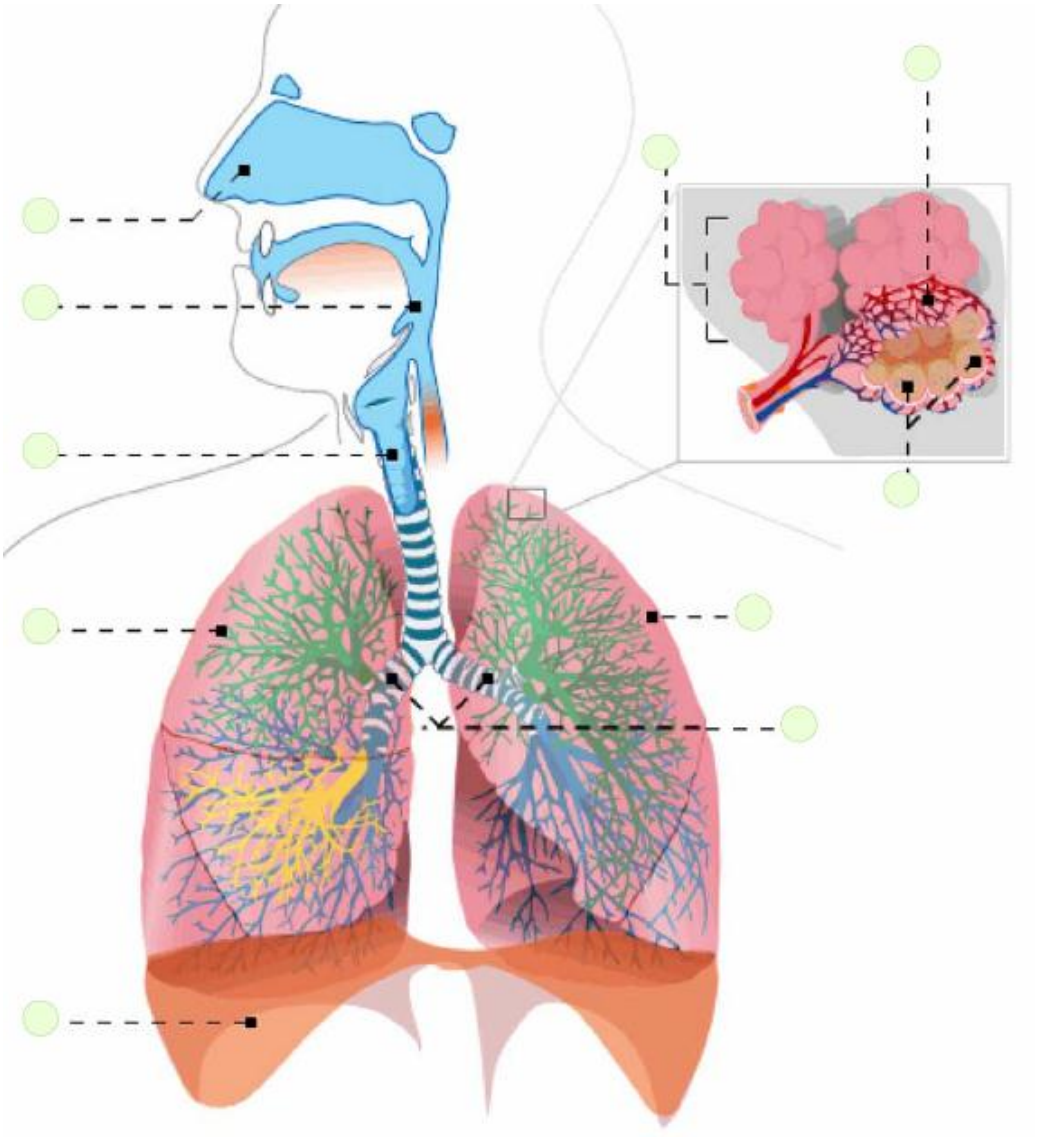
Respiratory System
Lapbook



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L-RESPI

Respiratory System Lapbook

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How do I get started?

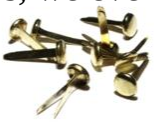
First, you will want to gather your supplies.

***** Assembly:**

Folders:** We use colored file folders, which can be found at Walmart, Sam's, Office Depot, Costco, etc. You will need between 1 and 4 file folders, depending on which product you have purchased. You may use manila folders if you prefer, but we have found that children respond better with the brightly colored folders. Don't worry about the tabs….they aren't important. Within this product, you will be given easy, step-by-step instructions for how to fold and assemble these folders. ***If you prefer, you can purchase the assembled lapbook bases from our website.

***Glue:** For the folder assembly, we use hot glue. For booklet assembly, we use glue sticks and sometimes hot glue, depending on the specific booklet. We have found that bottle glue stays wet for too long, so it's not a great choice for lapbooking. For gluing the folders together, we suggest using hot glue, but ONLY with adult supervision. These things get SUPER hot, and can cause SEVERE burns within seconds.

***Other Supplies:** Of course, you will need scissors. Many booklets require additional supplies. Some of these include metal brad fasteners, paper clips, ribbon, yarn, staples, hole puncher, etc. You may want to add decorations of your own, including stickers, buttons, coloring pages, cut-out clipart, etc. Sometimes, we even use scrapbooking supplies. The most important thing is to use your imagination! Make it your own!!



Ok. I've gathered the supplies. Now how do I use this product?

Inside, you will find several sections. They are as follows:

1. **Layout and Pictures:** This section gives instructions and diagrams that will tell the student exactly how to assemble the lapbook base and where to glue each booklet into the base. Depending on the student's age, he or she may need assistance with this process, especially if you choose to allow the student to use hot glue.

2. **Student Instruction Guide:** This section is written directly to the student, in language that he or she can understand. However, depending on the age of the child, there may be some parent/teacher assistance needed. This section will also tell the student exactly what should be written inside each booklet as he or she comes to it during the study, as well as telling the student which folder each booklet will be glued into.

3. **Booklet Templates:** This section includes ALL of the templates for the booklets. These have been printed on colors that will help to improve retention of the information presented, according to scientific research on color psychology.

Respiratory System Lapbook

Layout & Pictures

You will need 3 folders of any color. For each folder, you will fold both sides toward the original middle fold and make firm creases on these folds (Figure 1). Then glue the folders together along one flap (Figure 2).

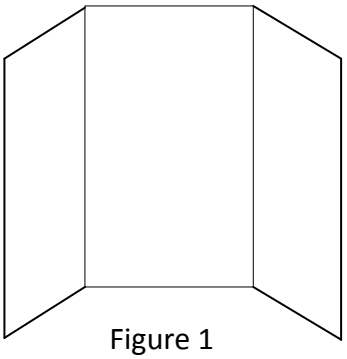


Figure 1

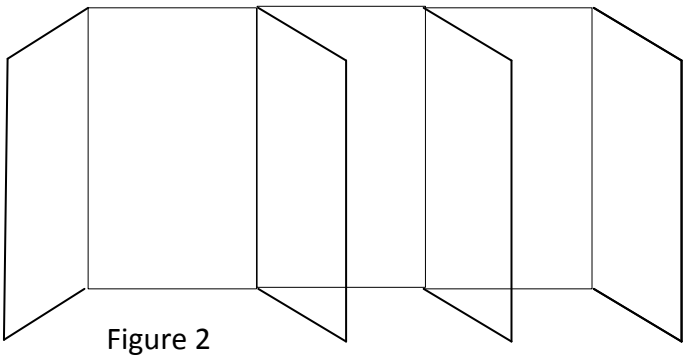
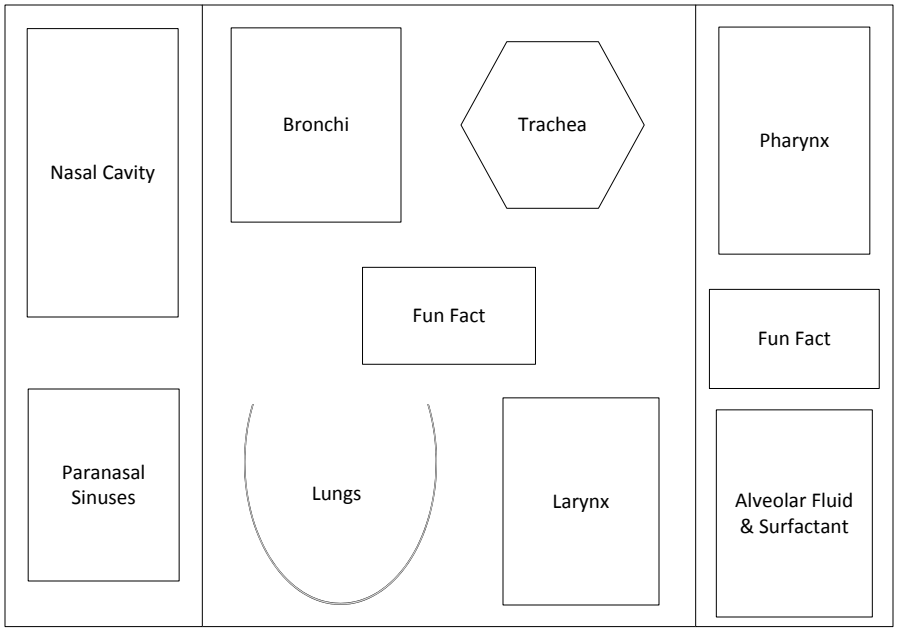


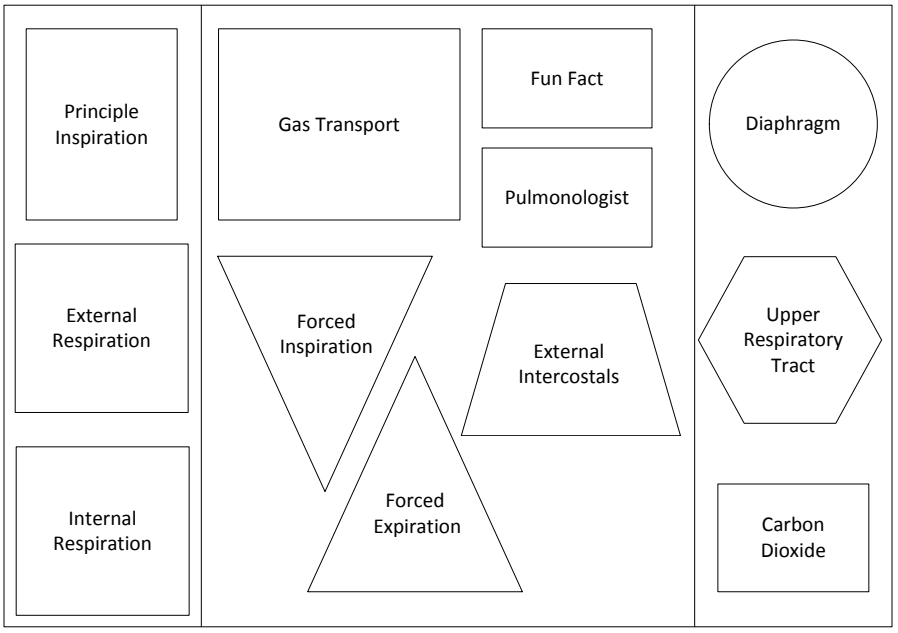
Figure 2

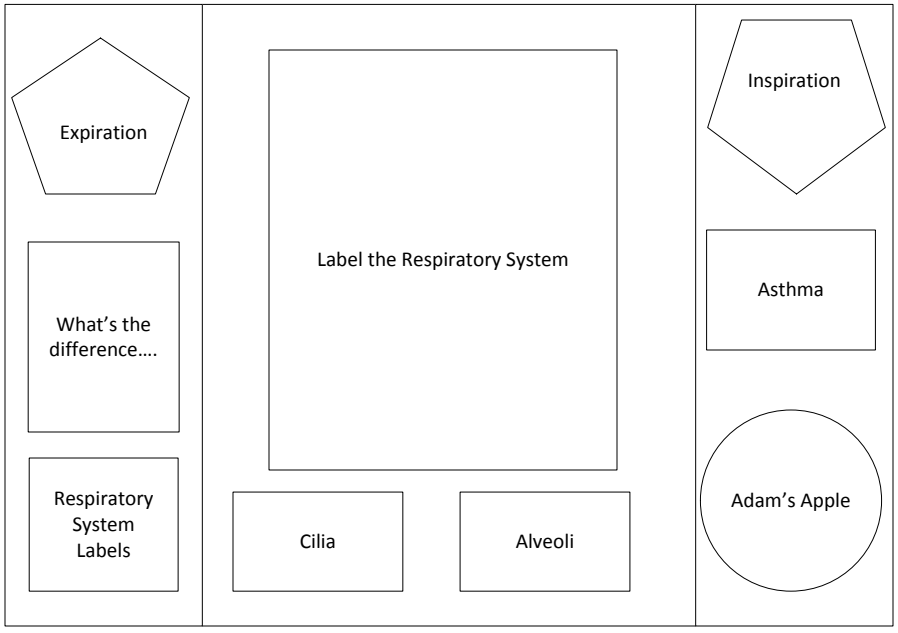
This is the "Layout" for your lapbook. The shapes are not exact on the layout, but you will get the idea of where each booklet should go inside your lapbook.



Folder 1

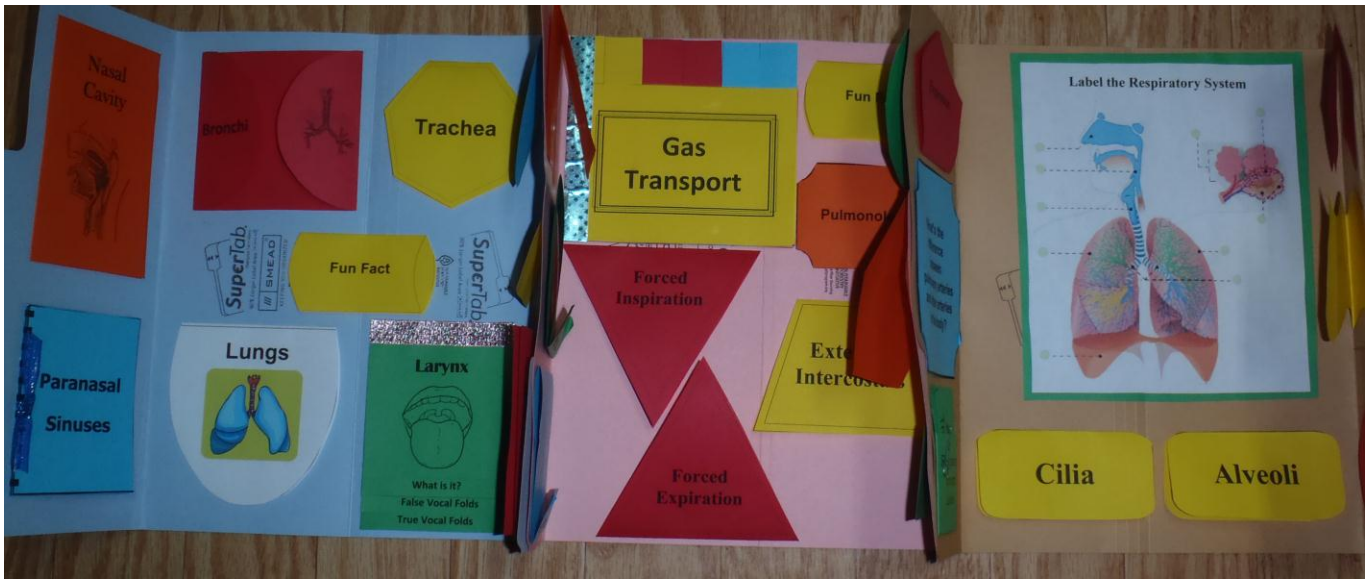
Folder 2



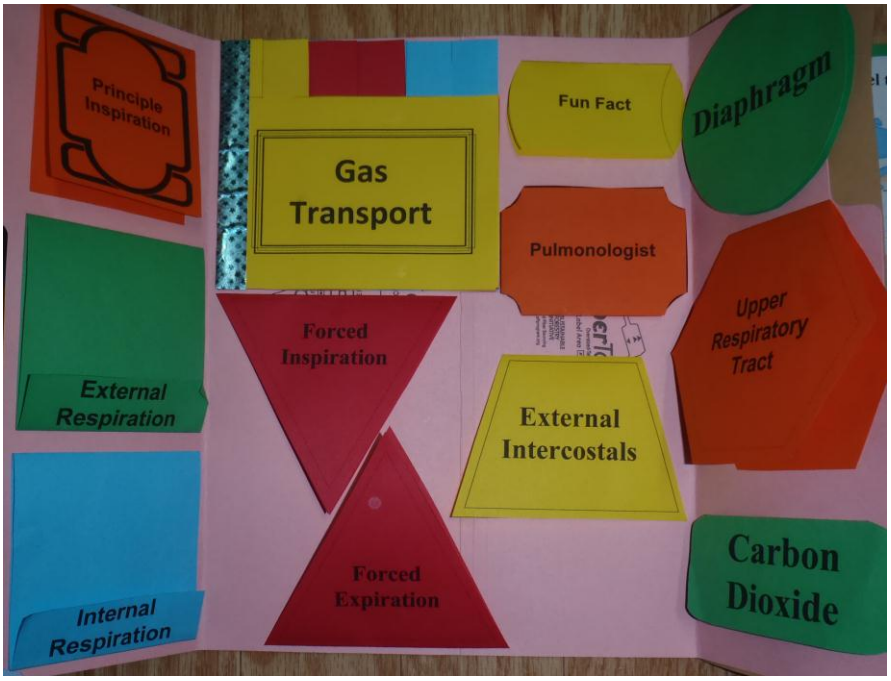


Folder 3

Below is a picture of a completed lapbook!!! This should help in figuring out how to assemble the booklets and then how to put it all together!



Folder 1



Folder 2

Folder 3

Respiratory System Lapbook

Student Instruction Guide

Booklet 1: Nasal Cavity

Assembly Instructions: Cut out along the outer black line edges of the booklet. Fold along the center line so that the title is on the front.

Completion Instructions: The respiratory system begins with your nasal cavity. In this booklet, tell about the important jobs of this part of the respiratory system.

Booklet 2: Paranasal Sinuses

Assembly Instructions: Cut out along the outer black line edges of the booklet and the extra pages. Fold the booklet along the center line so that the title is on the front. Stack the pages inside. Staple along the left side to secure.

Completion Instructions: The nasal cavity is surrounded by four pairs of nasal sinuses. Tell about them here.

Booklet 3: Pharynx

Assembly Instructions: Cut out along the outer black line edges of the booklet. Fold along the center line so that the title is on the front.

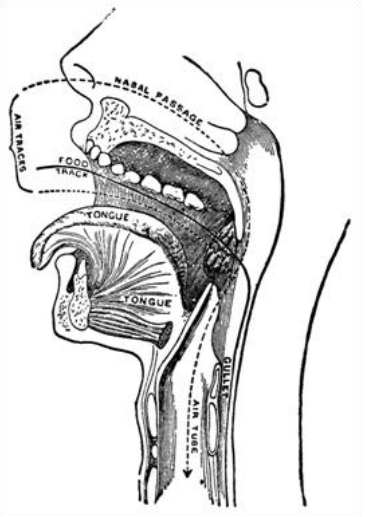
Completion Instructions: Inside this booklet, tell about the job of the pharynx.

Booklet 4: Larynx

Assembly Instructions: Cut out along the outer black line edges of each page. Stack them so that the title is on the top and the pages get longer toward the back. Along the top edge, punch 2 holes, and secure with metal brad fasteners or ribbon.

Completion Instructions: The larynx is the organ that allows you to talk and make noises. Tell about it here.

Nasal Cavity



Booklet #1

Paranasal Sinuses

Maxillary

Frontal

Booklet #2

Ethmoid

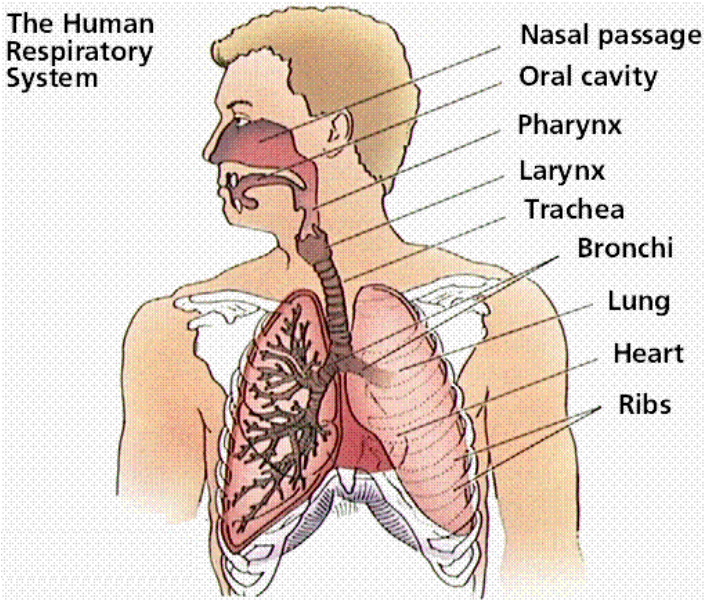
Sphenoid

Booklet #2

The Respiratory System

Lapbook

Teacher's/Study Guide



http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookRESPSYS.html

Breathing is probably something you haven't given too much thought to. Most of the time breathing happens without your having to give any conscious thought to it. When you're asleep your body still gets the air it needs. When you exercise, your rate of breathing increases to get enough oxygen. And when you try to hold your breath for as long as possible, your body always makes you release and grab another lungful of air before you pass out.

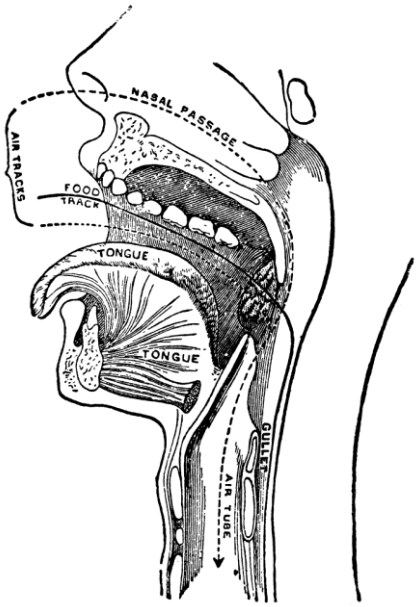
But how does all this happen? How does air get from outside your body down to all of the tiny little cells that make up the tissues in your body that need oxygen in order to stay alive?

To see a quick overall picture, let's follow the air we breathe. You breathe air in through your nose where it travels to your lungs. In the lungs the oxygen is transferred to red blood cells that carry the oxygen molecules throughout your body, deposit them at the tissues and organs that need the oxygen and then head back to get another load of oxygen.

But that explanation leaves out so many details! Our bodies were intricately designed to filter out any dust that is in the air we breathe, and we have certain muscles to keep us breathing as we sleep at night! Our bodies are pretty amazing!

So let's begin with the first part of the respiratory system, the nasal cavity.

Nasal Cavity



http://etc.usf.edu/clipart/23900/23995/air_passages_23995.htm#.UKKpFYdX05o

The respiratory system begins with your nasal cavity, which is located directly behind your nose. Basically it's a hollow space the air goes into when you breathe. The nasal cavity has several jobs.

First, it warms or cools the air to within one degree of your body temperature. This is very important. Imagine if you're outside playing in the snow, breathing in freezing air and that air makes it to the very tiny air passageways in the lungs. What do you think would happen? If you guessed your lungs would basically suffer frostbite, you're right! Now imagine you are out in the desert riding a four-wheeler. What do you suppose would happen if that hot air was breathed directly into your lungs? Those tiny air passageways in the lungs would be burned! Neither situation is pleasant to think about.

Mucous in the nasal cavity traps dust particles that you breathe in with the air. Little hairs, called cilia, line the nasal cavity. As the mucous traps the dust

particles, the cilia push that mucous to the back of the nasal cavity to an organ called the pharynx, which we will talk about more in a minute. But for now, what you need to know is that the pharynx leads to the esophagus, which leads to the stomach. And that is how those little dust particles are kept from getting into your lungs.

Paranasal Sinuses

The nasal cavity is surrounded by four pairs of nasal sinuses. These hollow spaces are interesting because we still don't understand what their purposes are. Some of the suggested jobs of these sinuses could be helping the nasal cavity to moisten and warm the air we breathe in. It's a topic that needs more research.

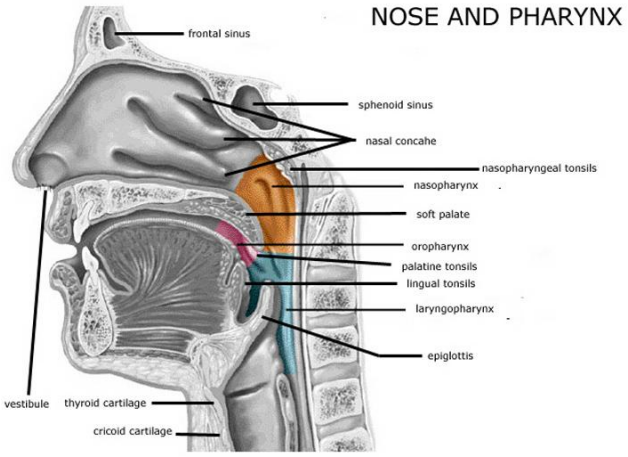
There are the maxillary sinuses, which are located around the nasal cavity.

There are the frontal sinuses, which are located about the eyes.

There are the ethmoid sinuses, which are located between the eyes.

And finally there are the sphenoid sinuses, which are located behind the ethmoid sinuses.

Pharynx



http://www.middlesexcc.edu/faculty/William_Kleinelp/Bio_112_SP04/respiratory_gallery/pages/nose_pharynx.htm