

Respiratory System Unit Project:

Since the respiratory system is a short subsection of the cardiovascular unit. Instead of having a unit test, you are assigned to complete this “Respiratory System” Unit project.

What you need to do:

Choose an option:

Create a “3D Theme park”

- The 3D Theme park option is designed for students who are creative and love to put things together. The 3D theme park will involve a lot of planning, and creative thinking as you will have to tie in with all the required topics into your theme park.
- I have seen some very creative projects that not only were they aesthetically pleasing but also included all of the required topics.

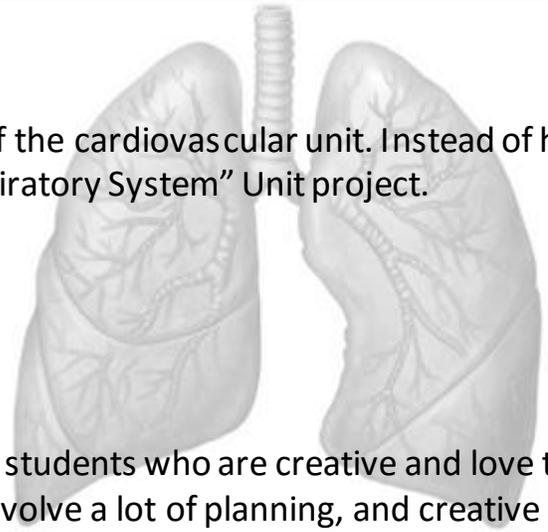
Create a “Interactive Board game”

- The Interactive Board game is designed for students who enjoy playing board games and have ideas in relating the topics into the form of a game.
- One caution to know is that many students tend to create “trivia” games such as just having a bunch of question / answer cards and the one that gets the most correct will win. But this isn’t creative at all as you are just simply making flash cards.
- To be completely creative, create a board game that is not simply a Q&A game but one that involves a twist. A good way to start is to look at existing board games and see how you can modify the game to cater to the topics needed.

Create a “Working Replica” of the respiratory system

- This option is made for students who are attention to detail and would like to create the working replica of the respiratory system. In addition to creating the replica, you also must include the other requirements listed above. Google search “making lungs out of plastic bottles” is a good place to start.

Other – let me know



What you need to include:

Here are all the topics YOU MUST include:

- How and where are gases exchanged in the lungs via what mechanism. Be specific and involve examples
- Overall flow of the respiratory system from inhaling to exhaling.
- Parts of the respiratory system – present either through a diagram, picture, or various individual parts.
 - lungs, pleura, nasal cavity, epiglottis, bronchi and bronchioles, alveoli, pulmonary capillaries, diaphragm, pharynx, larynx, trachea, uvula, ribs, and intercostal muscles
- Functions of the parts of the respiratory system (above)
- The mechanism of breathing involving pressure and diaphragm
- 1 Respiratory disease/disorder due to lifestyle choices

How much time do you have to work on your project:

You will have 3-4 complete classes to complete this. You will most likely need some at home time to work on this as well. Please bring in all supplies to class in order to work on it in class.

How you are assessed:

Creativity: How creative was your project? Was it just a Q & A trivia board game? Or was it a game that involved creative thinking? Was your theme park pretty rad? Or was it just straight forward?

/15 points

Accuracy: Did you include all of the topics above? Were they accurate and correct? Were they creativity incorporated into your project?

/15 points

In class assessment: Did you use your class time effectively? Bring in your supplies? Worked on your project in class? Etc...

/5 points

Total: /35 points