

## LESSON PLAN

1) Introduce the topic of organ systems. Assess the students' basic knowledge of the respiratory system. I would recommend using online resources such as padlet so that students can freely show their prior knowledge. The teacher can then discuss some commonalities, and perhaps dispel some common misconceptions.

2) Tell students that they will be exploring a Minecraft Edu model of the respiratory system to help them to visualize some structures, and to understand the overall function of the respiratory system. Tell students that they will be able to FLY, but they cannot destroy or build. Tell students that they CAN and SHOULD interact with NPCs. Also tell students that they CAN collect objects, but that they should ONLY TAKE ONE. Their ultimate goal is to receive 2 gold coins, which would mean that they have completed all quests in the world.

3) Print and pass out the Note-taking sheet (Page 2 and 3 of this lesson plan). Students should try to collect as much information on the Note-taking sheet as possible. They will have a limited time (perhaps 45 minutes) to collect that information. Tell students that they will have to take an assessment afterwards, based on the information that they collect on their Note-taking sheets.

\*Note: for students who have difficulty reading or writing, it may be a good idea to partner them with students who are proficient readers/writers, so that all students can benefit from the written information in the world.

4) Activate the world. Please make sure that it is set to "Minecraft Edu" mode, and that students CANNOT build, but they CAN ALWAYS FLY (it may be necessary to fly to access some parts of the map).

5) At the end of the time session, FREEZE the players, and have them disconnect.

6) To assess student understanding, teachers may have students play a Kahoot (for basic understanding) or a Socrative (for more detailed understanding). Alternatively, teachers may give other forms of assessment, like a written reflection, or having them create a physical scaled model of some sort, or having them recreate the scaled model in another Minecraft world (not included in this lesson). A good idea would be to repeat the initial pre-lesson assessment (again using something like padlet) to see what students have learned.

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**RESPIRATORY SYSTEM**

Check off ALL the objects and NPCs that you find:	What is it?	What is it for?	What did you learn?
<input type="checkbox"/> NASAL SINUSES			
<input type="checkbox"/> NASAL SEPTUM			
<input type="checkbox"/> UVULA			
<input type="checkbox"/> EPIGLOTTIS			
<input type="checkbox"/> ESOPHAGUS			
<input type="checkbox"/> TRACHEA			
<input type="checkbox"/> LEFT BRONCHUS			
<input type="checkbox"/> RIGHT BRONCHUS			
<input type="checkbox"/> LEFT SUPERIOR LOBE			
<input type="checkbox"/> LEFT INFERIOR LOBE			
<input type="checkbox"/> RIGHT SUPERIOR LOBE			
<input type="checkbox"/> RIGHT MIDDLE LOBE			
<input type="checkbox"/> RIGHT INFERIOR LOBE			
<input type="checkbox"/> ALVEOLUS			
<input type="checkbox"/> DIAPHRAGM			

**RESPIRATORY SYSTEM- NPCS**

<b>NPCs</b>	<b>Who is this?</b>	<b>Interesting Facts I Learned:</b>
<input type="checkbox"/> Aeris		
<input type="checkbox"/> Snot Funny		
<input type="checkbox"/> Boogie		
<input type="checkbox"/> Frank Farmer		
<input type="checkbox"/> Ember Eth		
<input type="checkbox"/> Hemoglobin		