Anatomy Hike

Ages 7-14

Activity Objective:

The purpose of this "blind walk" is to have children experience various situations via touch and feel. They will learn about the (simulated) parts of their breathing anatomy and become more familiar with the functions involved in an asthma episode.

This hike through camp will give campers a variety of outdoor experiences, heavy on asthma education.

Instructions:

- In this exercise all participants are blindfolded and instructed to hold hands, creating a human chain. One group leader should be stationed at every third child to lead, assist, instruct and help watch for obstacles while walking and keeping all campers safe during the Anatomy Hike.
- A leader will be chosen as the main voice and "tour guide", reading the educational script on page 10-12, encouraging campers to use their imagination and giving cues to the other leaders who are guiding the blindfolded group.
- At the starting point campers will line up and be instructed to stay together, help one another, listen to both the tour guide and the assistants. The tour guide will read this narrative script, adding embellishments where they can to add interest and excitement to the activity.
- Campers should be told that they are actually role-playing the part of the air that we breathe and will experience what happens as air travels through the respiratory system.
- At each activity site the tour guide will blow a whistle to indicate that an activity is about to occur (with the help of the assistants).

Materials Needed:

- ☐ Blindfolds (handkerchiefs, t-shirts, etc.)
- ☐ Whistle
- ☐ The script...(see pages 10-12)

Narrow Passageways Materials
- ☐ Folding tunnel
- ☐ Inner tube large enough to climb through
- ☐ Sheets to hang in trees to create maze/narrow passage
- ☐ Benches lined in narrow but safe configuration

Airway Simulation Materials
- ☐ Paper fan or battery operated fan
- ☐ Balloons

Muscle Bands Materials
- ☐ Rubber bands

Mucus Materials Needed
- ☐ Homemade or store bought slime (see mucus recipe on page 21)
- ☐ Bowl for hands to submerge
- ☐ Hose for cleaning station or by lake side

Alveoli Materials
- ☐ Grapes
- ☐ Rocks
- ☐ Marbles
- ☐ Playballs

Diaphragm Materials
- ☐ Trampoline or play parachute

Anatomy Hike Script and Instructions

Script Read by Lead Counselor:	Action/Activity:	Action Simulates:
"Breathing is automatic. We hardly ever think about it."	Group assembles, is blindfolded and joins hands to form chain. Group begins to walk as leader reads.	Group assumes the role of air.
"Oxygen enters our lungs from the air that we breathe, through the nose and mouth."	Counselors create forced air onto each camper using hand-held battery operated fan or paper fan.	Air entering nose, etc.
(Embellishments here — ie "see how this is a narrow passageway, just like your nostrils and the back areas of your nose!")	Campers crawl through large inner tubes lined up in a row or under tables or chairs arranged to provide a small passage.	Narrow air passageways.
"Air then passes through the pharynx (FAR-ingks) and is the place where the Eustachian (yu-STAY-shun) tube opens." "and the larynx (LAR-ingks) – the vocal chords" "and the trachea (TRAY-kee-ya) – also called the windpipe"	Campers stop; counselors take blown (but not tied) balloon and stretch the neck to expel air, making a noise next to the ears of the blindfolded campers.	Air passing through narrow tubes, vocal chord noises and air movement.
"Air goes to the left and right bronchi (BRON-kuy) and then enters the lung" (Embellishments here — talk about how the Bronchi deliver the air to right/left lungs)	Counselors lead the chain of campers left and right to "snake" their way into lungs. Campers can reach a "Y" in the passage and be led right or left.	Air moves left and right to lungs.
"It continues through the bronchial tubes and branches off as many as 25 times before reaching the alveoli (al-VEE-oh-lie)"	Counselors break up the chain of campers into smaller groups and continue to snake them around the outdoor area.	Air branches off many times before reaching the alveoli.

Anatomy Hike Script and Instructions

Script Read by Lead Counselor:	Action/Activity:	Action Simulates:
"Bronchial tubes are wrapped with smooth muscle bands." "These muscles are involuntary — that means you can't control them by trying to think about it or moving any other part of your body!" "This is called BRONCHOCONSTRICTION, and when this happens, the bronchial tubes get very narrow." "Thick mucus flows into the bronchial tubes. This happens because the airways are very inflamed & the narrowed passages adds to the difficulty in breathing."	Counselors wrap 2-3 rubber bands around each camper's wrist; campers are still in small groups.	Constriction of the smooth muscle bands.
"Mucus membranes help move the mucus OUT to clean the airways. Mucus glands produce the mucus to help clean the airways."	Submerge arms and hands into a bowl of "mucus" or slimy material such as store-bought slime, jello or refer to home-made mucus recipe on page 21.	The feel of mucus, its viscosity/thickness and movement.
(Embellish by saying that drinking lots of water/fluids will keep mucus flowing and moving through the body, especially the pulmonary system.)	Following this experience, have campers rinse "mucus" off at a cleaning station, by a lakeside or with a hose where they will also remove rubber bands.	Washing thick mucus out of the tubes with liquid. Muscle band expansion.
"Bronchial tubes branch off as many as 25 times before reaching the alveoli (the very tiny air sacs at the end of the bronchioles). They are tiny ball-shaped sacs that perform the MAIN function of the lungs…exchanging oxygen from outside air and carbon dioxide that is removed from the lungs!"	Still blindfolded, campers can put their hands in a bowl of grapes or walk through a small, enclosed area that has been filled with play balls.	Simulation of alveoli.

Anatomy Hike Script and Instructions

Script Read by Lead Counselor:	Action/Activity:	Action Simulates:
"As oxygen enters the blood vessels, carbon dioxide leaves the blood vessels and enters the alveoli when the person breathes out, using the largest muscle of respiration, the diaphragm."	Children remove blindfolds and take a deep breath. They are rewarded for completing the hike by jumping on a trampoline to experience the function and movement of the diaphragm, which moves up and down. Option: Use a large parachute or a tightly held sheet to bounce a ball high to simulate the diaphragm moving up and down.	Movement of the diaphragm.