

Cat Dissection

Title: The Respiratory System

Purpose: To dissect and observe the structures of the respiratory system.

Materials: shirt, gloves, paper towels, scalpel, forceps, scissors, probes, cat, colored pencils, rubber bands, drawing paper, lab manuals, handouts

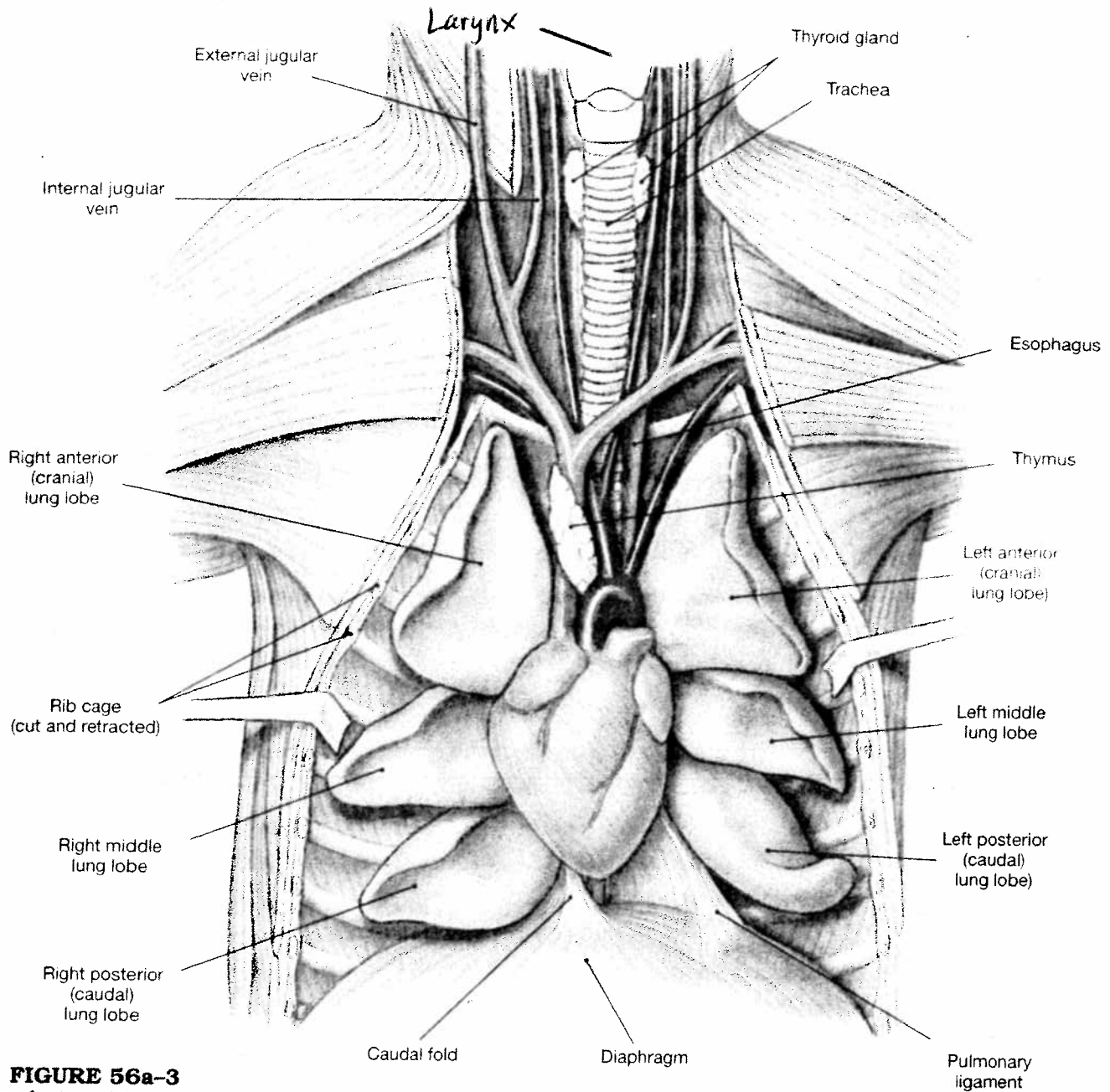
Dissection of the Cat Respiratory System

Procedure:

1. Use the illustration manual to aid in identifying the structures of the cat respiratory system
2. Using the cranial incision from the cardiovascular system, carefully spread apart tissues surrounding the larynx
3. Using the scissors, make a transverse cut through each of the **sternothyroid, thyrohyoid, and sternohyoid** muscles.
(Do not cut the larynx!)
4. Gently free the cartilaginous larynx anteriorly until it is free of its muscle attachments **(Do not pull out the larynx!)**
5. Observe the following structures:
 - Larynx*
 - Epiglottis (do not draw)
 - vocal cords (do not draw)
 - trachea*
 - primary bronchi (do not draw)
 - visceral and parietal pleura (do not draw)
 - pleural cavity (do not draw)
 - pulmonary veins and arteries (do not draw)
 - lungs (all lobes)*
 - diaphragm*
6. Using the diagrams provided draw, in detail, the respiratory system of the cat.
7. Label and color each of the parts that are * from step 5

Conclusion Questions:

1. Describe the functions of each of the structures that are * in step 5. (4 organs total)
2. Trace the path of airflow in the respiratory system starting from the nose to the alveoli.
3. Describe the process of inspiration (include volume and pressure changes).
4. Describe the process of expiration (include volume and pressure changes).



● **FIGURE 56a-3**
Respiratory System of the Cat. Right accessory lobe posterior to heart not shown.