Describe the anatomy of the larynx

Functions
- sphincter → prevent aspiration
- phonation → communication
- cough

Anatomy
- anterior neck structure
- anteriorly = thyroid + platysma
- laterally = carotid sheath
- posteriorly = laryngopharynx + C4-C6
- superiorly = oropharynx

Comprised of 9 cartilages
- 3 paired = arytenoid, corniculate, cuneiform
- 3 unpaired = thyroid, cricoid, epiglottis

Muscles

<table>
<thead>
<tr>
<th>Arytenoid</th>
<th>Thyroid</th>
<th>Cricoid</th>
<th>Epiglottis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thyroarytenoid</strong></td>
<td>(loosens VC)</td>
<td><strong>Posterior cricoarytenoid</strong></td>
<td><strong>Aryepiglotticus</strong></td>
</tr>
<tr>
<td>(abduct VC)</td>
<td>(adduct VC)</td>
<td>(closes epiglottis over VC)</td>
<td></td>
</tr>
<tr>
<td><strong>Cricoid</strong></td>
<td><strong>Cricoarytenoid</strong></td>
<td><strong>Thyroepiglotticus</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Lateral cricoarytenoid</strong></td>
<td>(tenses VC)</td>
<td>(part of thyroarytenoid)</td>
<td></td>
</tr>
</tbody>
</table>

Also transverse and oblique arytenoideus → abduct cord

Blood supply
- superior and inferior laryngeal arteries

Innervation
- **Superior laryngeal nerve**
  - **Sensory** to supraglottis, glottis and epiglottis
  - **Motor** to cricothyroid (tenses vocal cords)

- **Recurrent laryngeal nerve**
  - **Sensory** to subglottis
  - **Motor** to all intrinsic laryngeal muscles except cricothyroid

- **Glossopharyngeal nerve**
  - **Sensory** to tongue base and vallecula
Above view corresponds to Lehane-Cormack Grade I (upside down)