

FIG 4-31 Location of the lobes of the lungs within the thoracic cavity. (From Patton KT, Thibodeau GA: *Anatomy and physiology,* ed 8, St Louis, 2013, Mosby.)

Inspection of the lungs primarily involves observation of respiratory movements. Evaluate respirations for (1) rate (number per minute), (2) rhythm (regular, irregular, or periodic), (3) depth (deep or shallow), and (4) quality (effortless, automatic, difficult, or labored). Note the character of breath sounds, such as noisy, grunting, snoring, or heavy.

Evaluate respiratory movements by placing each hand flat against the back or chest with the thumbs in midline along the lower costal margin of the lungs. The child should be sitting during this procedure and, if cooperative, should take several deep breaths. During respiration your hands will move with the chest wall. Assess the amount and speed of respiratory excursion and note any asymmetry of movement.

Experienced examiners may percuss the lungs. Percuss the anterior lung from apex to base, usually with the child in the supine or sitting position. Percuss each side of the chest in sequence to compare the sounds. When percussing the posterior lung, the procedure and sequence are the same, although the child should be sitting. Resonance is heard over all the lobes of the lungs that are