During infancy the chest's shape is almost circular, with the anteroposterior (front-to-back) diameter equaling the transverse, or lateral (side-to-side), diameter. As the child grows, the chest normally increases in the transverse direction, causing the anteroposterior diameter to be less than the lateral diameter. Note the angle made by the lower costal margin and the sternum, and palpate the junction of the ribs with the costal cartilage (costochondral junction) and sternum, which should be fairly smooth.

Movement of the chest wall should be symmetric bilaterally and coordinated with breathing. During inspiration the chest rises and expands, the diaphragm descends, and the costal angle increases. During expiration the chest falls and decreases in size, the diaphragm rises, and the costal angle narrows (Fig. 4-30). In children younger than 6 or 7 years old, respiratory movement is principally abdominal or diaphragmatic. In older children, particularly girls, respirations are chiefly thoracic. In either case, the chest and abdomen should rise and fall together. Always report any asymmetry of movement.

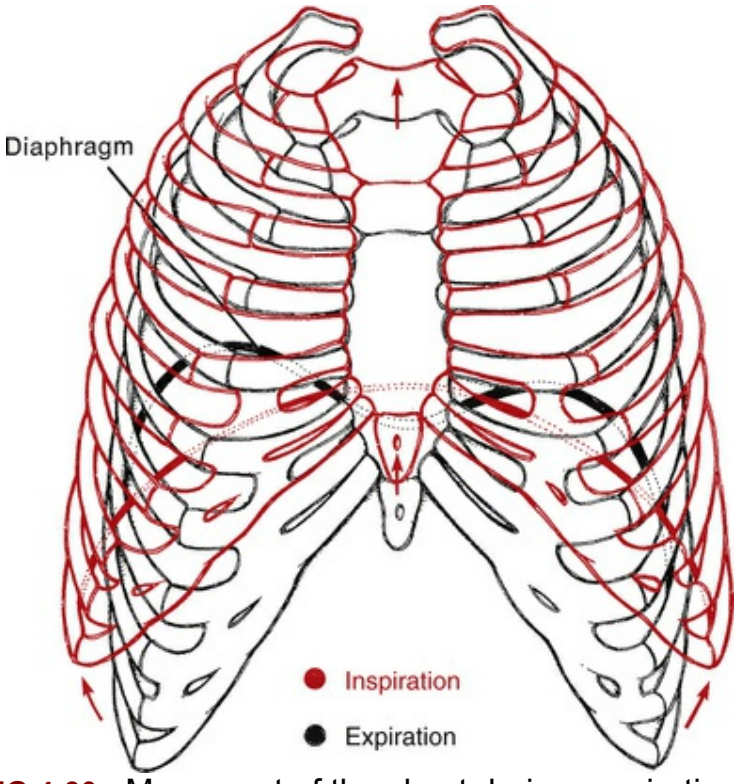

FIG 4-30 Movement of the chest during respiration.