and develop. The degree to which infants are prepared for extrauterine life can be predicted to some extent by birth weight and estimated gestational age (see Clinical Assessment of Gestational Age, Chapter 7).

Within the past decade, increasing attention has been given to **late preterm infants**, that is, infants born between 34 and $36\frac{6}{7}$ weeks' gestation. Such infants have some of the same risk factors as those born before 34 weeks' gestation, but physical characteristics and adaptation to extrauterine life are variable. Late preterm infants have metabolic and physical immaturity that places them at risk for greater mortality and morbidity than term infants (Cheong and Doyle, 2012). Studies have demonstrated decreased cognitive and motor function in late preterm infants at 24 months compared with term infants (Woythaler, McCormick, and Smith, 2011). In the following sections, the discussion of preterm infants continues to apply to all infants who are born before a completed gestational age of 37 weeks. Because prematurity now encompasses a wider age, weight, and physiologic maturity range, physical characteristics described may also vary; such descriptions are generalized for description purposes.

Diagnostic Evaluation

Preterm infants have a number of distinct characteristics at various stages of development. Identification of these characteristics provides valuable clues to the gestational age and hence to the infant's physiologic capabilities. The general, outward physical appearance changes as the infant progresses to maturity. Characteristics of skin, general attitude (or posture) when supine, appearance of hair, and amount of subcutaneous fat provide cues to a newborn's physical development. Observation of spontaneous, active movements and response to stimulation and passive movement contributes to the assessment of neurologic status. The appraisal is made as soon as possible after admission to the nursery because much of the observation and management of infants depends on this information.

On inspection, preterm infants are very small and appear scrawny, because they have only minimal subcutaneous fat deposits (or none in some cases) and have a proportionately large head in relation to the body, which reflects the cephalocaudal