# Liquid Crystal Skin Contact Thermometer (Chemical Dot Thermometer)

This single-use, disposable, flexible thermometer has a specific chemical mixture in each circle that changes color to measure temperature increments of  $\frac{1}{2}$  of a degree.

# There are two types:

- 1. Kept in mouth (1 minute), axilla (3 minutes), or rectum (3 minutes); color change is read 10 to 15 seconds after removing the thermometer
- 2. Wearable, continuous-use thermometer, which is placed under axilla; may be read within 2 to 3 minutes after placement and continuously thereafter; discard and replace every 48 hours

### **Pulse**

A satisfactory pulse can be taken radially in children older than 2 years of age. However, in infants and young children, the **apical impulse** (**AI**) (heard through a stethoscope held to the chest at the apex of the heart) is more reliable (see Fig. 4-33 for location of pulses). Count the pulse for 1 full minute in infants and young children because of possible irregularities in rhythm. However, when frequent apical rates are necessary, use shorter counting times (e.g., 15- or 30-second intervals). For greater accuracy, measure the apical rate while the child is asleep; record the child's behavior along with the rate. Grade pulses according to the criteria in Table 4-4. Compare radial and femoral pulses at least once during infancy to detect the presence of circulatory impairment, such as coarctation of the aorta. (See inside back cover for normal rates for pediatric age groups.)

#### **TABLE 4-4**

## **Grading of Pulses**