



FIGURE 19.2. Diagrammatic representations of common diagenetic processes and products. (A) Compaction. (B) Pressure solution resulting in the interpenetration of two quartz grains. (C) Partial dissolution of a twinned feldspar grain with remnants of the original grain surrounded by a later cement (diagonal ruled pattern). (D) Overgrowths of quartz cements (light gray) over rounded detrital grains (dark gray). The overgrowths have euhedral terminations into a former void that was later filled by a second generation of cement (diagonal ruled pattern). (E) Shell fragments (ruled pattern) serve as the substrate for the growth of cement crystals normal to the shell surfaces out into a large pore where they had euhedral terminations. These first-formed cements were later buried by a second-generation anhedral mosaic of cement (gray) that almost completely filled the pore (remaining pore space black). (F) A feldspar crystal pseudomorphed by clay minerals that replaced the original grain.