Film on Glaciers

I. Produce fertile soils

II. 1836 Agassi (pioneering glaciologist)
A. Glaciers move and produce a specific kind of sediment = till;
B. they also produce eratics.

III. Definition: a large, long-lasting mass of ice

IV. High elevation, and latitude where precipitation > evaporation

V. Sequence leading to production of glacial ice
A. Snow + compaction = firn + compaction = glacial ice
B. Glacial ice = metamorphic rock

VI. Plastic deformation: at depth of about 20 meters, ice starts to flow.
A. Movement is fastest at the center
B. Movement is slower at the edges

VII. Types
A. Valley AKA Alpine Glaciers
B. Continental AKA “ice sheets” (movement radiates from the center of accumulation)

VIII. Zones
A. Accumulation (snow fall > snow melt)
B. Wastage (snow fall < snow melt)
C. Snowline “firn limit” (boundary between Z of accumulation and Z of wastage)

IX. Types of erosion (like ice held sand paper)
A. Polishing
B. plucking
C. grinding
D. gouging
E. “U” shaped valleys

X. Deposits
A. Till forms moraines
   a. Lateral
   b. Medial
   c. Terminal
   d. Ground
B. Sorted material (in eskers where flowing water sorted sediments)