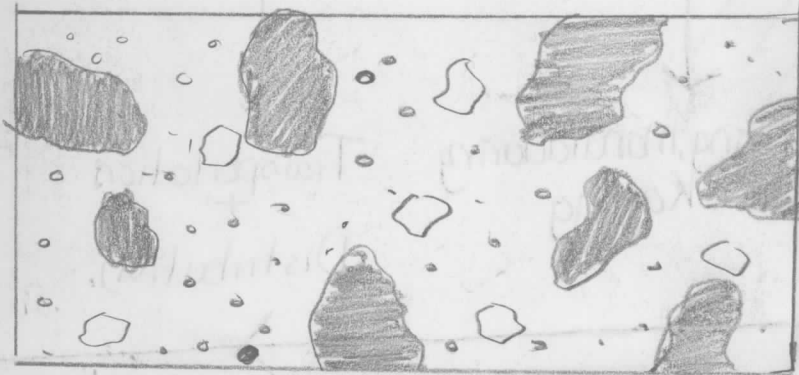


Concrete

- > made by mixing cement + various minerals w/ enough water to cause cement to set and bind the entire mass
- capable of being formed to any shape, low in cost, fire-resistant.



Cement

- Type I used for general construction
- Type II in general construction resistance to moderate sulfate action where heat buildup can be damaging
- Type III highly-early-strength portland used early removal of formwork is desired or in cold-weather
- Type IV: low-heat generates less heat used for construction of massive concrete structures.
- Type V sulfate-resisting portland used where resistance to severe sulfate action is required

Water

- must be free of organic material; a general criterion is the water should be fit for drinking
- water for coating, setting, and binding the aggregate particles together in a concrete mix

Aggregate

- refers any inert materials, as sand + gravel added
- 60% - 80% to concrete volume, creates strength, weight + fire-resistance
- Admixtures may be added to a concrete mix to alter its properties