Atomic - an atomic operation or block is done as a single, indivisible unit (no corruption, no dirty reads, etc.)

Mutex - short for mutual exclusion. Lock interface from text is a mutex. Used for things similar to when we'd use synchronized in Java.

Critical Section - a block of code that must be completed "atomically". While one thread is in a critical section (like setName on President), other threads cannot also be in critical sections.

Peterson's Algorithm - a two-thread mutual exclusion solution.

FIFO - First-In-First-Out queue. add/remove were our methods, enqueue/dequeue are other names that are sometimes used.

Cache - CPU core has a cache holding some values from RAM. Cache access is super-fast compared to RAM access. But there can be issues with stale data.

Memory Barrier - going through a memory barrier flushes caches out (writes) and brings caches up-to-date with what's in RAM. Helps deal with out-of-order execution. (int a = 3; int b = 4; and b might be assigned before a!). Going into and out of synchronized Java blocks/methods uses memory barriers.