NEUTRAL ATOMS
- Have equal numbers of protons & electrons (electrically neutral)
- Can be in different energy states

“TRAPPING” QUBITS
To be useful as a qubit, a single atom must be caught and held in place.
To do this:
- lasers cool & slow the atoms
- optical tweezers hold them in place

QUANTUM GATES
Single qubit gates
Lasers and microwaves are used to change the energy state of a qubit.
Multi-qubit gates are tricky!
Normally, neutral atoms do not interact with one another when spaced apart.

MEASUREMENT
Qubits are measured with lasers
- Qubits in the 0 state emit light
- Qubits in the 1 state do not

ADVANTAGES
1. Stable! 
   Able to hold a quantum state for a relatively long period of time
2. No manufacturing errors
   Naturally occurring – each qubit is the same
3. Good connectivity
   Can be organized into 2D grid
4. Highly Scalable
   Can be densely packed and individually controlled

CHALLENGES
1. Individual qubits can be difficult to control
2. Atoms occasionally break free from trap

FIND MORE QUANTUM COMPUTING ZINES HERE:
https://www.epiqc.cs.uchicago.edu/resources/

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