What is the difference between
Four Wheel Drive (4WD)
and
All Wheel Drive (AWD) ?

Four wheel drive (two choices here: part time 4WD and full time 4WD, but I'll refer to full time 4WD to explain the difference) is a system that powers all four wheels at all times. Driver has a choice of a "4-high" (that's your everyday setting) and "4-low" (for demanding off-road situations).

When "4-low" is selected the wheels receive substantially more (on a Grand Cherokee its 2.72 times more) torque than in "4-high" - at the same time substantially slower speeds are achieved (2.72 times slower on J GC).

The low setting is an advantage for drivers who need to tow and maneuver a heavy trailer etc and for drivers who at one point or another may want to negotiate off-road terrain.

All wheel drive (symmetrical full time AWD) is a system that powers all four wheels of a vehicle at all times as well. No choice of "4-low" - only "4-high" available, however. Due to the lack of "low range" AWD vehicles are much less capable than 4WD vehicles.

Recently some new AWD systems (asymmetrical automatic AWD) have evolved. Fancy names like "Real Time 4WD" are hiding the fact that they are essentially sophisticated 2WD systems. They should be called part time AWD systems. They provide the same stability advantages of symmetric AWD, however. They are less capable than symmetrical full time AWD systems and inferior to full time 4WD.

Here is how they work: During traction loss on the driven axle (could be front or rear) a fully automatic system (hydraulic, mechanical or electronic) routes briefly torque to the other axle. This means you have to completely lose traction in 2WD on your driven axle first and THEN the other axle will take over and try to keep the car stable. So, for a moment you have AWD. Doesn't mean too much because only two wheels have traction. Once both axles rotate at the same speed again the system moves back to 2WD. Examples: Honda CRV, LandRover Freelander, Isuzu Trooper (TOD), Volvo V70, 1999 Jeep Grand Cherokee Quadra Trac II (but Jeeps low range provides “part time” 4WD).