1) Lagrangian dynamics allows for the use of generalized coordinates, as well as removing the need for free body diagrams for each linkage.

2) Newton second law is the derivative of energy

3) The potential energy is independent of $\dot{q}$, and the Kinetic energy can be written in the form: $K = \frac{1}{2} \dot{q}^T M(q) \dot{q}$

4) The mass matrix, $M(q)$. The coriolis/centrifugal matrix, $C(q, \dot{q})$. The gravitational force vector, $g(q)$.

5) Any robotic manipulator can be modeled and controlled using the standard form equations

6) The $C(q, \dot{q})$ matrix isn't included since all the joints are prismatic