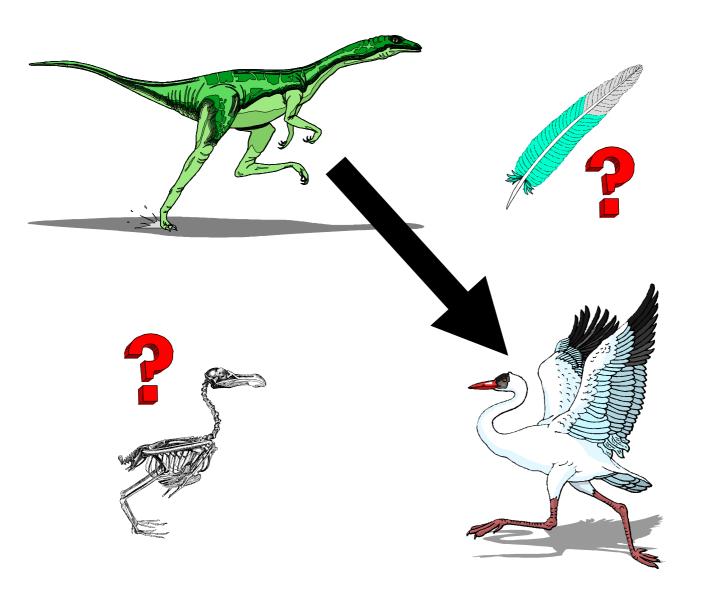
For the flight of birds to have evolved from reptiles, the following had to be fully functional from the very beginning:-



feathers, feather barbs, a preening gland, hollow bones, strut-strengthened bones, a wishbone, rapid breathing, air sacs, an extra muscle, and a 180°-turning head