**FK - Spine Setup**

- create 5 joints

-jnt\_spine1

-jnt\_spine2

-jnt\_spine3

-jnt\_neck

-jnt\_head

-make sure these are oriented correctly, z pointing in same direction, x following the direction of the joint chain

-create a nubs circle and snap it to the spine1 joint, scale it up to be visible outside your character mesh. FREEZE TRANS/Delete History

-duplicate this and snap up the joint chain till you have 5 nurbs circles snapped into position of the joints. Name all controls with "(jointname)\_ctrl"

-move the head\_ctrl above the characters head and shift the pivot point back down to the jnt\_head joints position. FREEZE TRANS/Delete History on all controllers

-Orient Constraint each joint to the relating controller. (Select the controller, select the joint Constraints-Orient Constraint)

-Now setup your parenting on your controllers. Parent Spine2 to Spine1, parent spine 3 to spine 2, and so on. Leave the head controller alone.

-**Now the tricky part**. You will notice the spine is working fine, but the head controller is floating and not following. If we were to parent the head controller in, we would not get isolated motion on the head... lets fix that.

-Select the head controller and ctrl-g Group it to itself.

-move the pivot point of this new grp "group1" to the head joint position. rename it to head\_grp

-duplicate head\_grp (Ctrl-D) and delete the contents of the new group.

-Rename the new group to head\_const

-Point Constrain head\_grp to head\_const ( Select in outliner head\_const, ctrl select in outliner head\_grp, point Constrian)

-Parent head\_const under neck control.

We now have the head controller moving with the rest of the FK Spine, and it is isolated, so we can animate/pose it seperatley to the rest of the spine.