Using Blender 2.6 for Animation - Part 11 - Inverse Kinematics

Turn on Inverse Kinematics:

* Go to Pose Mode
* Select “Auto IK” checkbox on left
* Now parents will automatically follow child (e.g. moving the hand will pull the arm along with it)

Add inverse kinematics to a bone (so that bone even has it with Auto IK turned off):

* Select any bone in Pose mode
* In Pose Mode, click **Pose**, **Inverse Kinematics**, **Add IK** **to bone** then before moving the mouse off the window, “**Without Targets**”
* Now you can move the child & the parents will follow
* To move the whole body, select the Armature in Object Mode (Ctrl Tab toggles Pose Mode)

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| TIPS:   * After **Add IK** **to bone** if you choose **To New Empty Object** * Now there is an “Empty Object” (looks like a 3D set of crosshairs). Now you can move the empty object, & the follower bone & all bones leading to it will “reach” for the target. Keep in mind, with a target, the bone will always point toward the target & even if you try to move the parents manually they will follow. You can’t use forward kinematics when there is a target. |

If object doesn’t move naturally, fix Automatic Weights: see Part 10

You must **not** be in Edit mode on armature, or armature won’t render as animated (Caveat tested in 2.63)

**Part 11 Project**

**Dramatic Scene**

* Create an urban short movie (it can be a scene from a movie, a simple scene, or for a bonus, a complete original story)
* You can use a prebuilt city model, or city generator for the set
  + After running city generator, make sure you click

File, External Data, “Pack Into Blend File” to get all generated textures.

* Graded on:
  + **Does it successfully communicate something**
  + **Animation appears to be what you intended**

**BONUS: do a voiceover (1 or more speaking parts or narration)**

-you can do a voiceover in Adobe Premiere Elements with classroom mic after rendered

**ALTERNATE BONUS: create your own story that has a beginning, middle & end**

Examples of complete stories with a beginning, middle, & end:

-Introduce character’s identity/feeling, prepare to do something, then do it

-Introduce character’s identity/feeling, talk to someone, show feeling after alone