I. Maya Overview - Simply put, nodes with attributes that are connected.
   A. Dependency Graph - the model by which every item is represented by a node, and is
   related to other nodes through dependencies and relationships.
   B. Nodes - Every element in Maya is described by either a single node or a series of
   connected nodes.
      i. A Node is a generic object type in Maya.
      ii. Nodes can be anything from curves, to surfaces, to lights and shaders.
      iii. Typical nodes:
          a. Transform node - contains positioning information.
          b. Input node - represents options the drive the creation of an object.
          c. Shape node - contains all the component information that represents
             an object.
   C. Channel box - laundry list, window with editable value fields for everything in each node.
   D. Attribute Editor - each node is defined by a series of attributes that relate to what the
   node is supposed to accomplish.
   E. IMPORTANT - Virtually every attribute of every node can be keyframed and animated.

II. Maya Menus - most tools and actions you will use are found in the main menus.
   A. Main Menu
      i. The first seven menus are always visible. (File, Edit, Modify, etc...)
      ii. The next few menus change depending on the UI mode you are in.
   B. UI Mode / Menu sets - there are four modes, which allow you to focus on tools for a
   particular workflow.(shortcuts are in bold)
      i. Animation - F2
      ii. Modeling - F3
      iii. Dynamics - F4
      iv. Rendering - F5
      v. h + LMB - gives you a marking menu of UI modes.
   C. The Shelf
      i. A personalized collection of frequently used menu items, tools, etc...
      ii. Ctrl+Alt+Shift on a menu item to add it to your shelf.
      iii. Options -> Customize UI -> Shelves - to edit the shelf contents.
      iv. Allows you to tailor the UI to your particular workflow.
   D. Hotbox - otherwise known as "THE SHIT".
      i. A UI tool that gives you access to as much or a little of the May UI as you want.
      ii. It appears at where your cursor is, and offers the fastest access to tools and
          actions.
      iii. Press and hold the spacebar - opens the hotbox.
      iv. Hotbox layout
         a. Topmost menu is the main menu.
         b. Second from the top is the focused panel menu.
         c. Bottom menu is relative to the UI mode you are in.
      v. Quadrants - N, S, E, W (and center)
         a. Hold customizable marking menus.
         b. Each quadrant can hold up to three menus, one for each mouse
            button.
         c. Clicking in a quadrant opens the menus.
      vi. Hotbox controls - allows you to customize the hotbox.
         a. use the Hotbox controls box.
         b. use the center marking menu.

III. Manipulators
   A. Tool Manipulators - a menu with important tools which resides at the top left of the
   workspace.
      i. Q - Select - used to select objects, components, and hierarchies based on the
         selection mode buttons.
      ii. W - Move - lets you move items in the workspace.
      iii. E - Rotate - lets you rotate items in the workspace.
      iv. R - Scale - lets you scale items in the workspace.
      v. T - Show Manipulator - toggles on and off transform manipulators
      vi. Y - holds the last tool you used.
   B. Transform Manipulators -
      i. Transformation nodes contain position, orientation and scaling information.
      ii. To help access and interactively edit these transforms, there are a set of
          transformations manips that you can access.
      iii. Manipulators use RGB colors to respectively correspond to the XYZ axis.
      iv. Selected handles are displayed in yellow.
IV. The Maya Workspace
A. Channel Box
B. Status bar
C. Tools/Shelf
D. Feedback line
E. Layers
F. View panels
G. Time line
H. Command line
I. Help line

V. Panels and Layouts - A way of organizing view panels.
   A. The Panels menu in all panels lets you change the contents that view panel or it allows
      you to change the layout of all the panels.
      1. View panels - Perspective, and orthographic modeling views.
      2. Other panels - Panels can display other types of information, including:
         i. Hypershade
         ii. Graph Editor
         iii. Dependency Graph
         iv. Dope Sheet
         v. Hypergraph
         vi. Renderview
   B. Panels -> Layouts -> x - lets you select various types of layouts. (e.g. Four, one
      perspective, and three orthographic windows.)
   C. Panels -> Saved Layouts -> x - lets you select various preset view panel layouts. (You
      can save your own presets also.)
   D. Window Focus - is determined by which view panel the mouse is in.
   E. To zoom a panel to full screen, simply tap the spacebar. Tap the spacebar again and
      the panels will return to the previous layout.

VI. View Tools - when working in perspective, orthographic, or most other panels, you can change
your point of view through these *shortcuts*.
   A. Alt + click-drag LMB - tumble in perspective view
   B. Alt + click-drag MMB - track in any view panel
   C. Alt + click-drag LMB+MMB - dolly into any view panel

VII. Display options.
   A. Shading options
      1. - Use the Shading menu on each view panel to choose how you want to display
         the geometry.
      2. 4 - sets the panel to wireframe display.
      3. 5 - sets the panel to smooth shaded display.
   B. Hardware texturing and lighting
      1. Use the Shading menu on the view panel to toggle on/off hardware texturing
         and lighting. (Some machines don't have this option.)
      2. 6 - toggles on/off hardware texturing.
      3. 7 - toggles on/off hardware lighting.
   C. Smoothness
      1. By default, NURBs surfaces are displayed using a rough smoothness, in order
         to enhance playback and interactivity.
      2. 1 - for rough smoothness.
      3. 2 - for medium smoothness.
      4. 3 - for high smoothness.
      5. Note: geometry smoothness is relative to the modeling process, and has
         nothing to do with the final render. The smoother your geometry, the slower
         the level of interactivity.

VIII. Show menu
   A. The Show menu restricts what each panel can show on a panel-by-panel basis.
   B. Restricting what is displayed in one particular window or another is a great way to
      minimize RAM requirements, and to promote better interactivity.
   C. You can hide surfaces in one window, and edit the curves of a surface, while watching
      your changes in an adjacent window where surfaces are showing, but everything else
      is off.
VII. Selecting in Maya
   A. Selection Masks
      i. At the top of the workspace, there are several mask tools available.
      ii. Lets you have one Select tool that is "masked" so it can select only certain types
          kinds of objects and components.
      iii. Very powerful, lets you select any combination of selecting types.
   B. Selection Modes - to toggle between Object and Component modes use F8.
      i. Hierarchy - lets you select different parts of the scene hierarchy.
      ii. Object - lets you perform selections on object types.
         a. Selection masks allow you to select items such as, surfaces, lights, IK
            handles, etc.
         b. Selection Masks can be further tailored by RMB on the mask icon,
            toggle on and off individual items. (the same for other Modes.)
      iii. Component
         a.Lets you select various components in the shape nodes of objects.
         b. Selections include CVs, isoparms, Hulls, etc.
   C. RMB selecting - useful tool in conjunction with Masks/Modes.
      i. Selecting an object with the RMB brings up a marking menu that lets you choose
         various components available for that object.
      ii. After selection the object, the global selection modes/masks return.