

## LESSON PLAN 15: TUTORIAL FOR DEEP EXPLORATION (PART 1)

**Objective:** Learn to download models from Google SketchUp and 3D Warehouse, and animate in 3D modelling program Deep Exploration

**Age range:** 13-18

Downloading models from the Google 3D Warehouse, and animating them in Right Hemisphere's Deep Exploration is easier than one would first assume. Why? Google SketchUp has a direct link to the 3D Warehouse and, although navigating Deep Exploration may seem like a daunting task at first, once the basics have been learnt, using the functions of the software becomes second nature.

### YOU WILL NEED

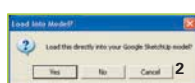
- ▶ Computer and Internet access
- ▶ Google SketchUp
- ▶ Deep Exploration CAD Edition version 5.0

### DEVELOPING SKILLS

Planning and researching, project management, 3D modelling, animation, problem-solving

### METHOD

1. **Open Google SketchUp.** Click on the image of the man to highlight him and press delete.
2. **Click on File>3D Warehouse>Get models.** This takes you to the Google 3D Warehouse (but only if you are connected to the Internet).
3. Search for a model to download – ensure SketchUp is running while you do this. (Diagram 1) We've chosen a car designed by 'Bob'.
4. **Click on Download Model.** A pop-up box should appear asking if you want to load the model directly into SketchUp. Select **Yes.** (Diagram 2)
5. The model should appear in SketchUp. You will need to click in the viewport where you want the model to be placed. (Diagram 3) Make any adjustments that are necessary and save the file. If the model does not appear, download it to your 'My Documents' folder. Then open as you would any type of file, by clicking **File>Open.**
6. **Open Deep Exploration.** Click **Ctrl + Shift + N.** This opens a new scene in the program.
7. To import your model that you have just downloaded from Google 3D Warehouse, click on **File>Open** and locate the model.



Click **Open.** Your model should now be open in Deep Exploration. (Diagram 4)



8. To animate the car, you need the animation toolbars. Click on

**View>Controls** then **Toolbars>Animation controls.** Repeat the process to bring up the animation timeline.

9. Click the **Edit Keyframes** button. If it's not showing, click on **View>Controls** then **Toolbars>3D editor.** The animation controls toolbar under the viewport should now have a red box around it.

10. Select the model of the car. Ensure the entire model is selected. You can do this by selecting the first object in the scene tree.



A box should appear around the car. (Diagram 5)

11. Now for the movement. Select the **Move** button. Crosshairs should appear in the viewport. (Diagram 6) Hover the mouse



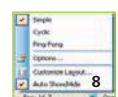
over the Y axis (the blue arrow), then click and drag it forward, approximately 5mm. On the animation

controls toolbar, click the forward arrow. This creates a new sequence. Move the car forward again, and then press the **Forward** button on the animation controls toolbar. Repeat this sequence until you are satisfied with how far the car has been moved.

12. On the animation timeline (above the viewport) there should be a grey arrow just under the number 30. Drag this arrow back to the number of sequences you have in your animation. (Diagram 7) Left click on the small arrow pointing down on the animation controls.



Select **Simple.** (Diagram 8) Deselect the **Edit Keyframes** button.



13. To view your animation, click the **Forward** button.

COMPILED BY **TIFFANY BROWNING**

Google SketchUp is available free from <http://sketchup.google.com>

For more information on Deep Exploration contact Brenda Frisk at Nextspace on 09 571 4104.

**NEXT ISSUE:** PART 2 – HOW TO MAKE IT MORE REALISTIC BY ANIMATING THE CAR'S WHEELS. **PLUS** FIND OUT HOW YOU COULD WIN A COPY OF DEEP EXPLORATION!



### DROP US A LINE

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