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ENVIRONMENT & LEVEL DESIGN

UE4 Scaling in Maya

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Game Production - Scaling and Workflow

- **Scaling in Maya for Unreal Engine 4 (UE4)**
- **General tips for good workflow**

Scaling in Maya & Unreal Engine 4

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Use of Scale

Ensuring the correct scale is used in production of game assets is vital.

This allows all assets created to work within the game engine together in the most painless and efficient way.

Adhering to correct scaling values will **save considerable time and effort** in production!

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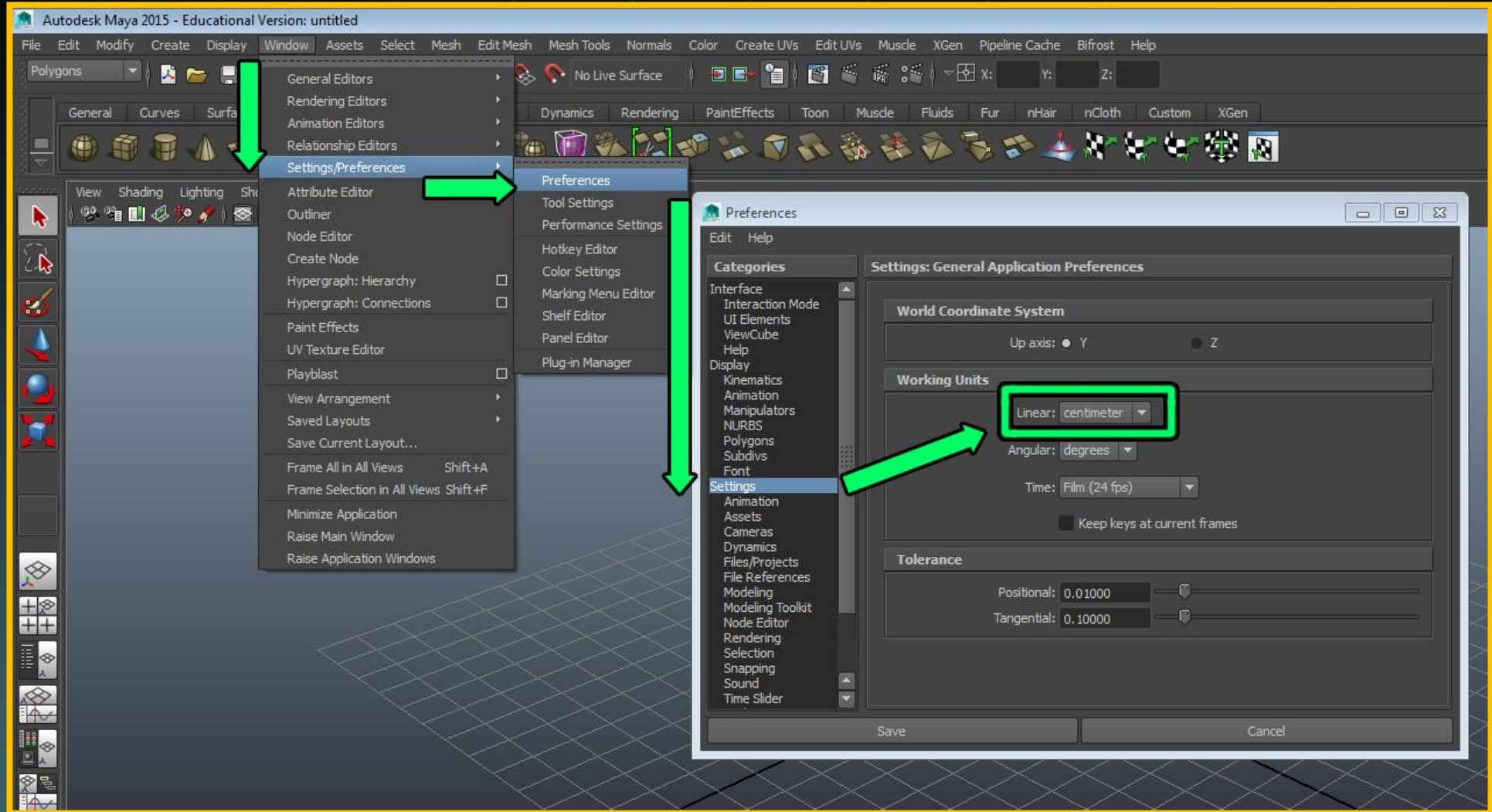
What you need to know:

1 Unreal Unit (UU) = 1 cm

In order to model to the correct scale, you need to set up and use the correct grid settings in Maya.

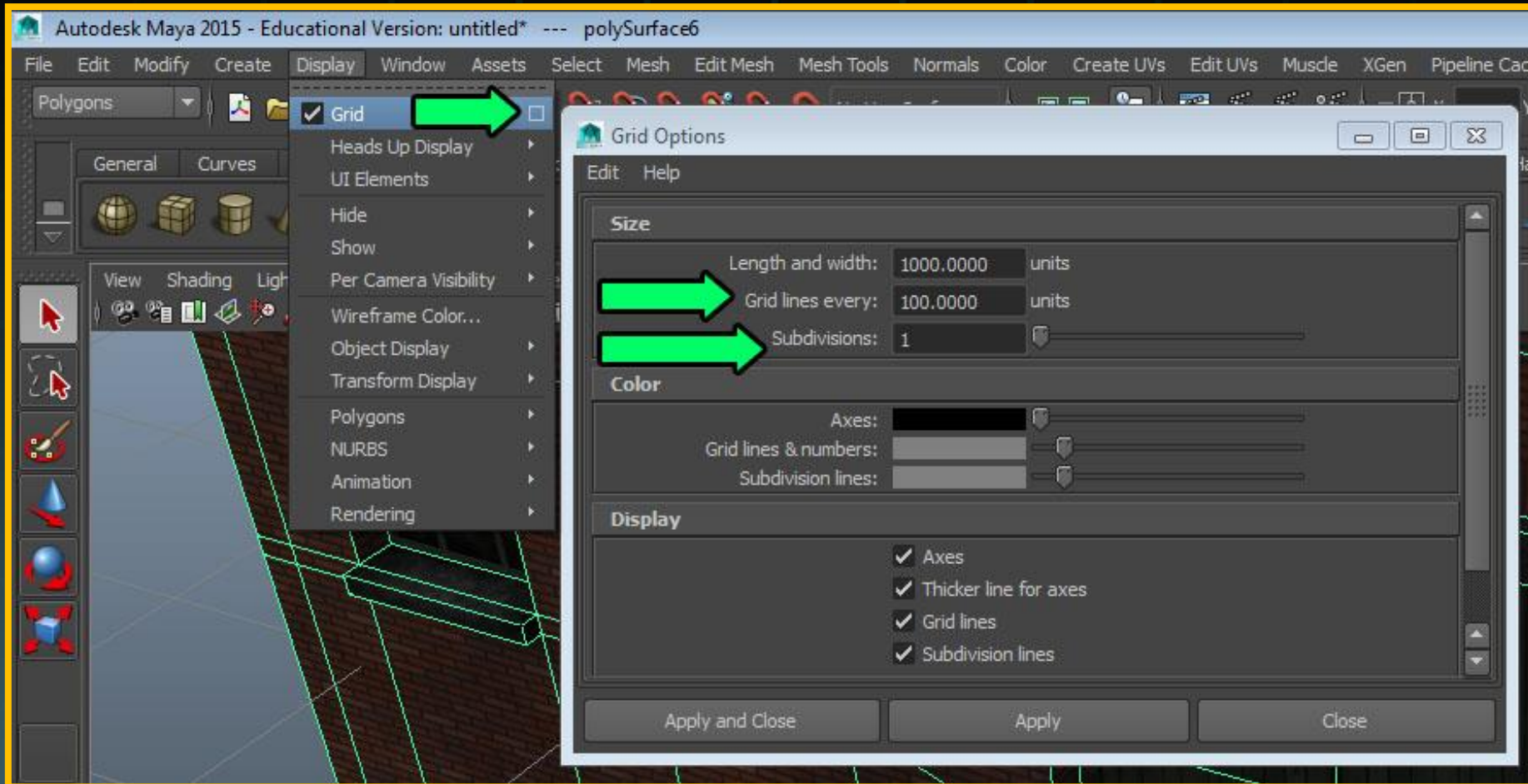
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Setting up correct scale grid in Maya



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Setting up correct scale grid in Maya



In this example: 1 Grid Unit = 1 Metre

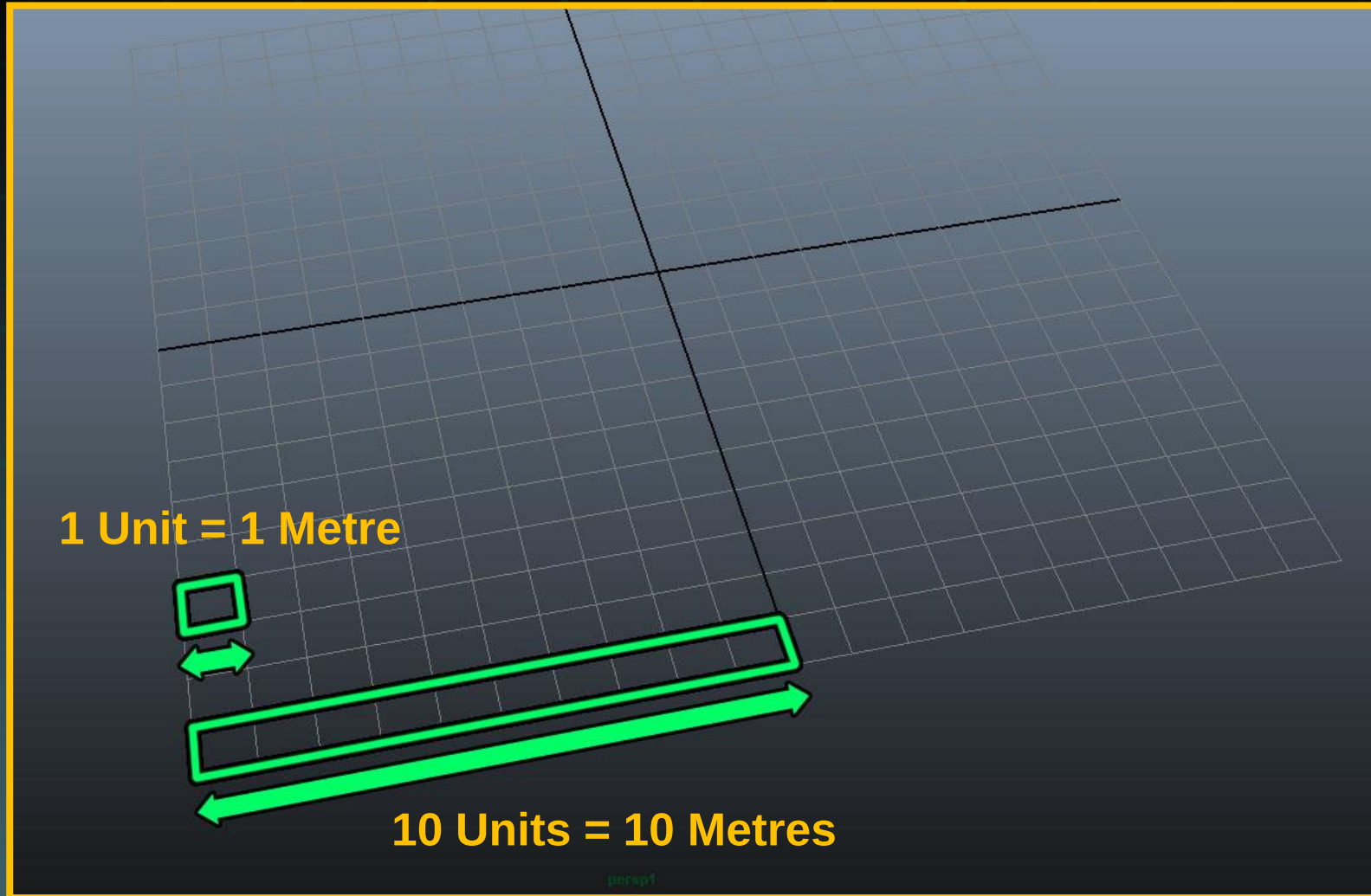
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Setting up correct scale grid in Maya

- Use **METRIC** units of measurement (mm, cm, m) otherwise grid scaling will not work!
- The grid **Length and Width** can be any size – this just changes how much space to grid covers in the viewport.

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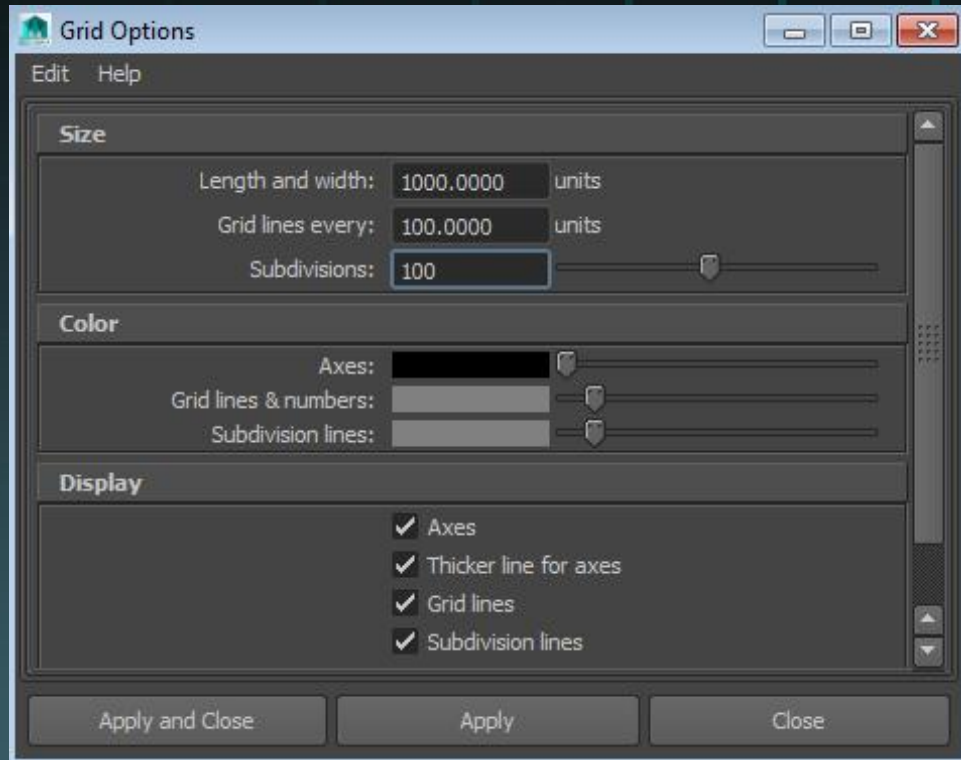
Setting up correct scale grid in Maya



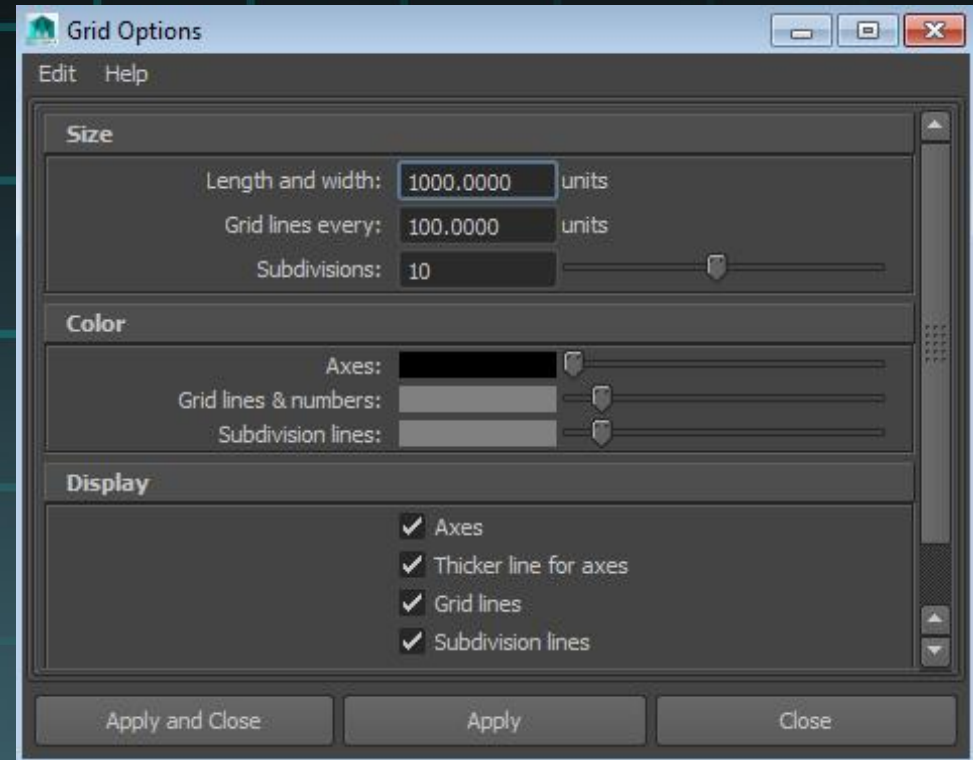
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Setting up correct scale grid in Maya

Altering Grid Subdivisions can help with finer details:



Grid lines every 1cm

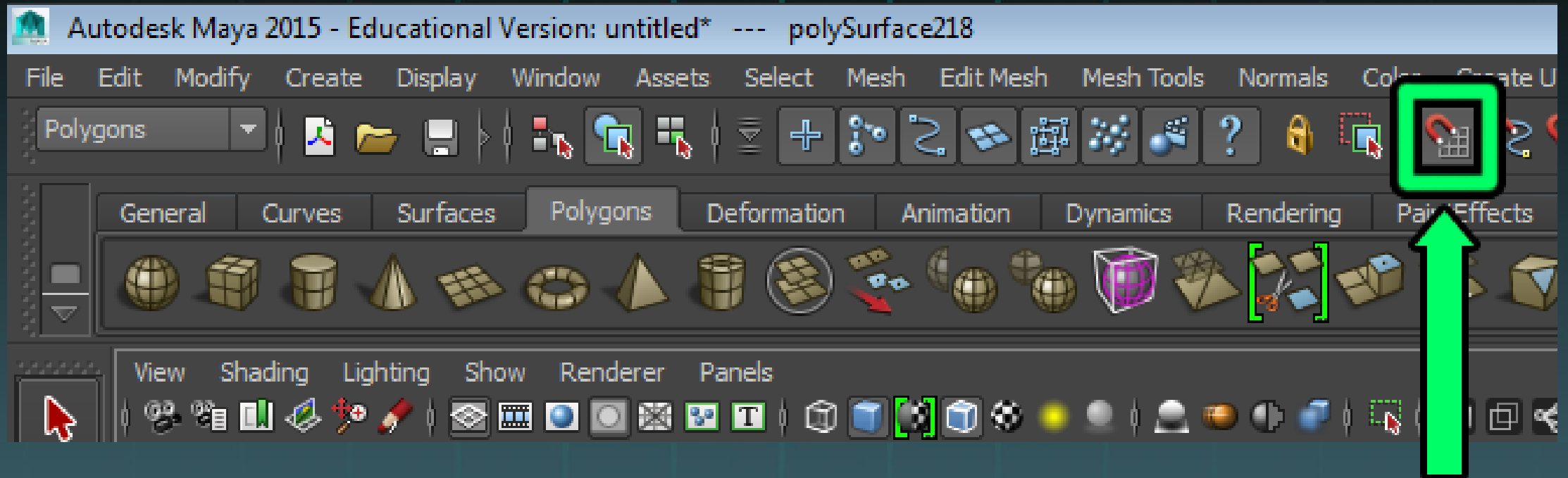


Grid lines every 10cm

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Setting up correct scale grid in Maya

Use **Snap To Grid** to get the most out of this method!



Snap To Grid Tool

General tips for good workflow

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Use scale references

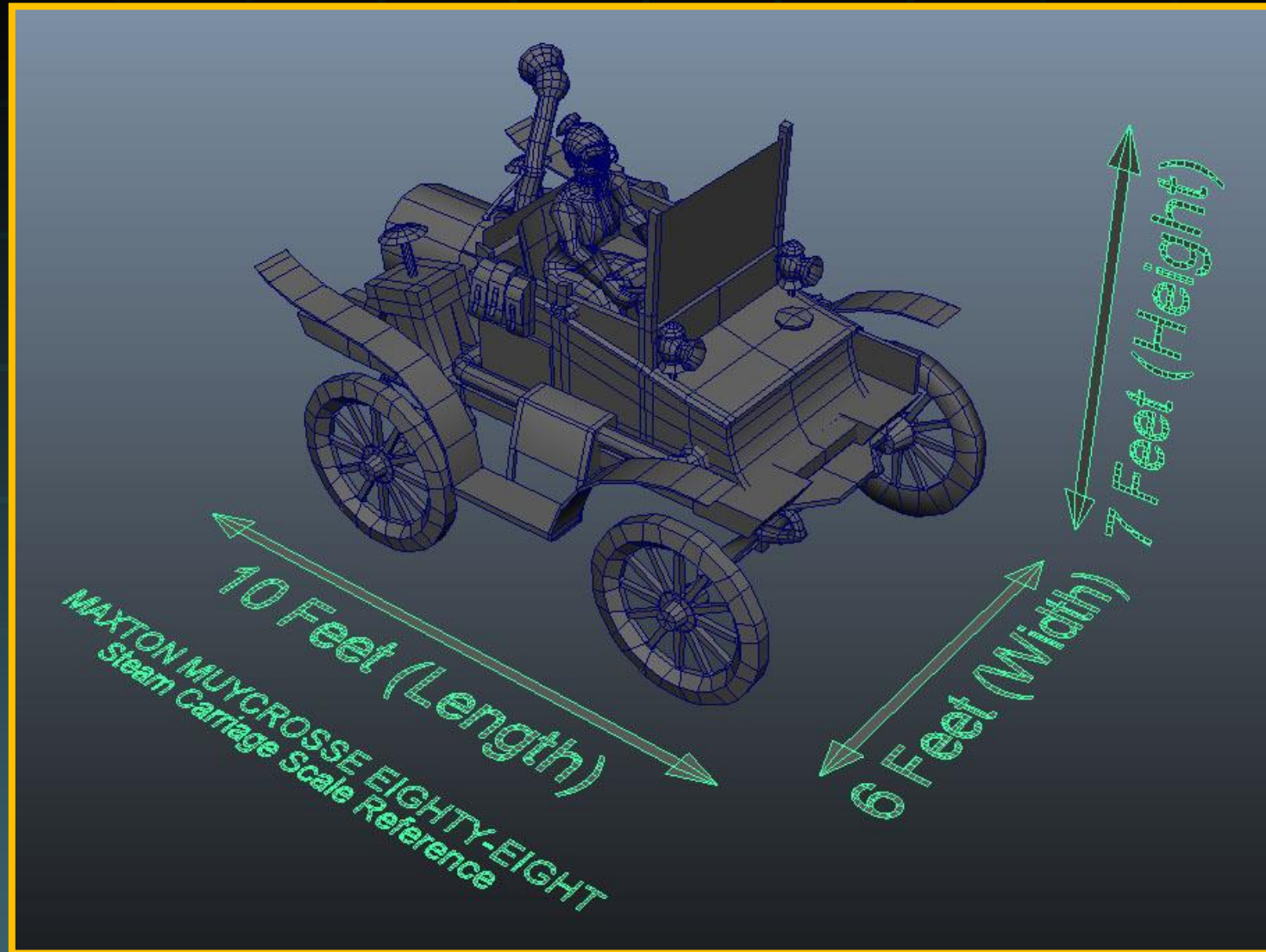
By using scale references you will be able to model assets at the correct size.



- Characters
- Door frames
- Size of vehicles

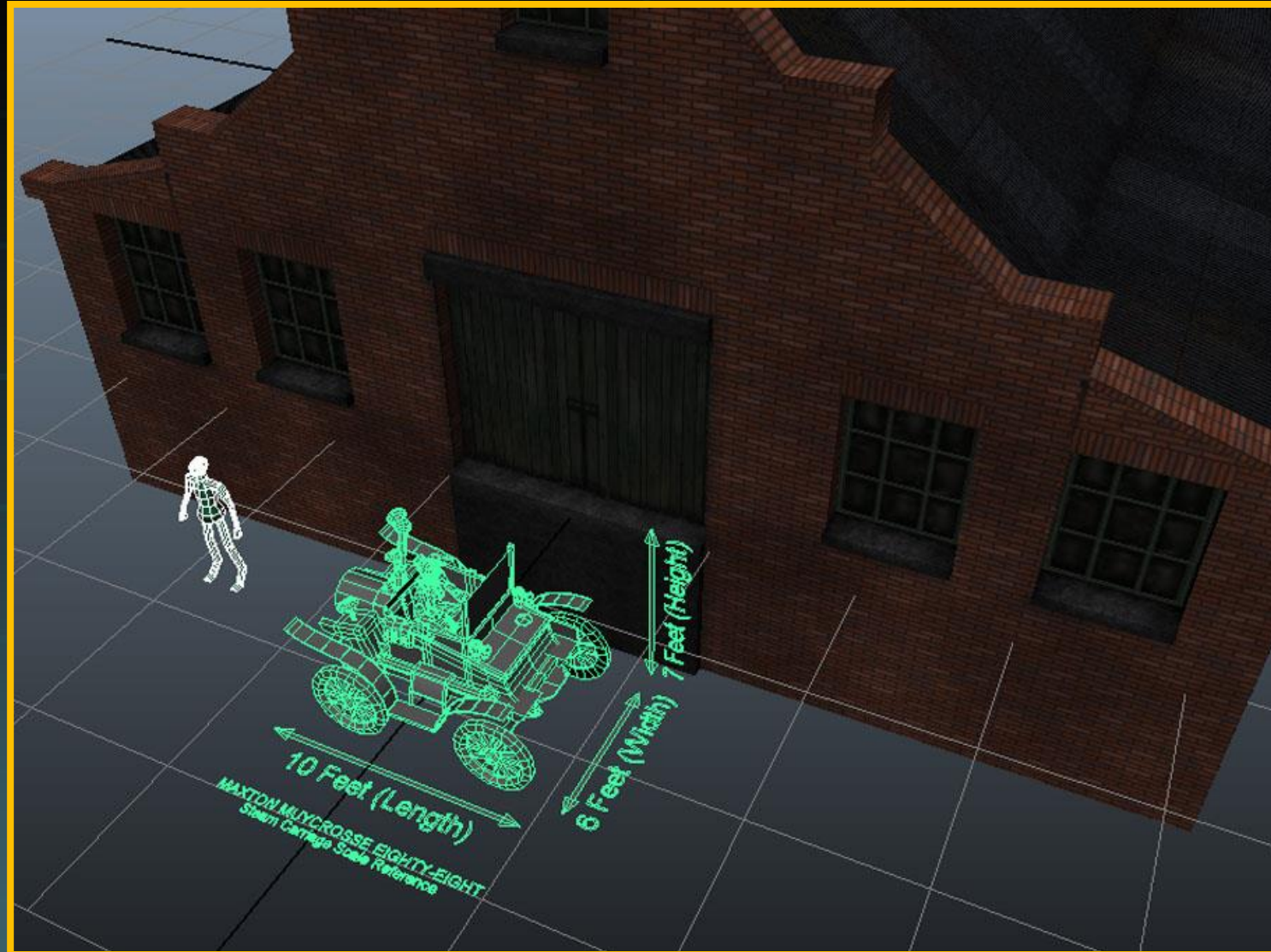
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Use scale references (but don't use feet like this does..!)



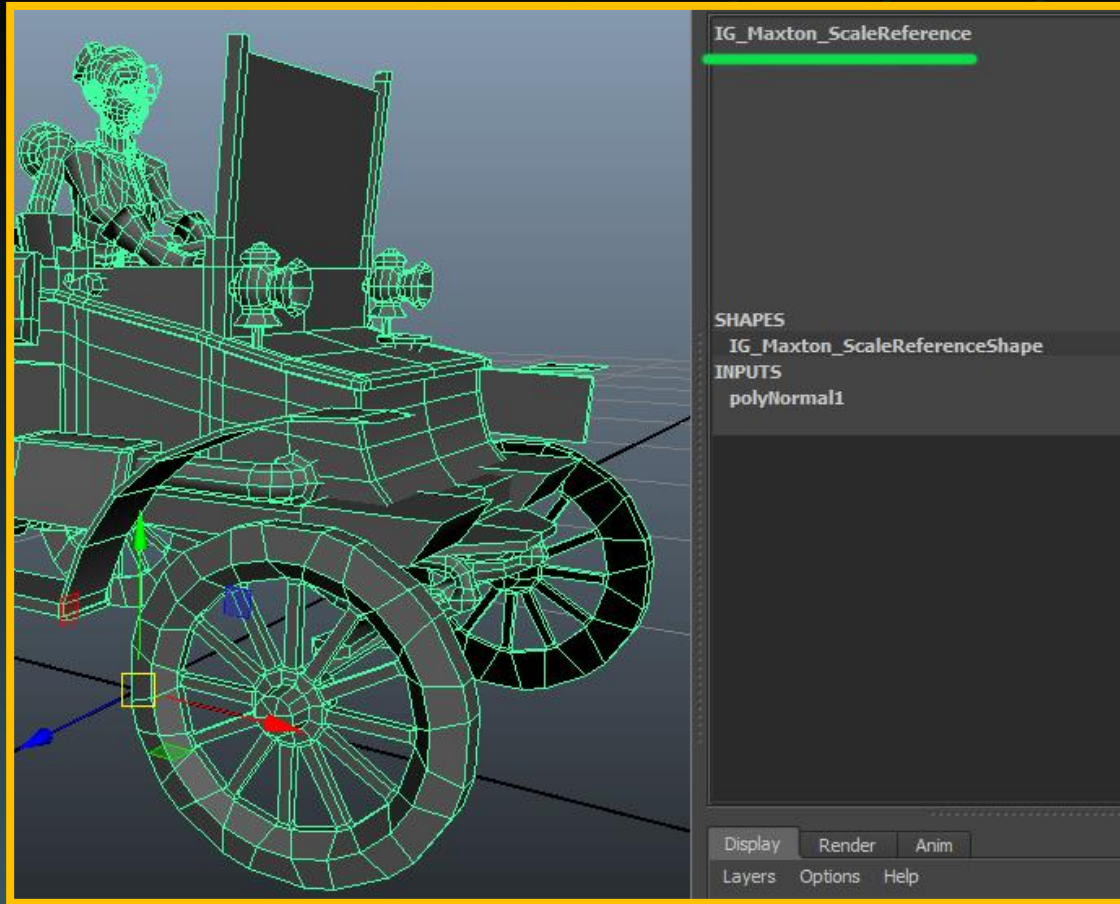
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Use scale references

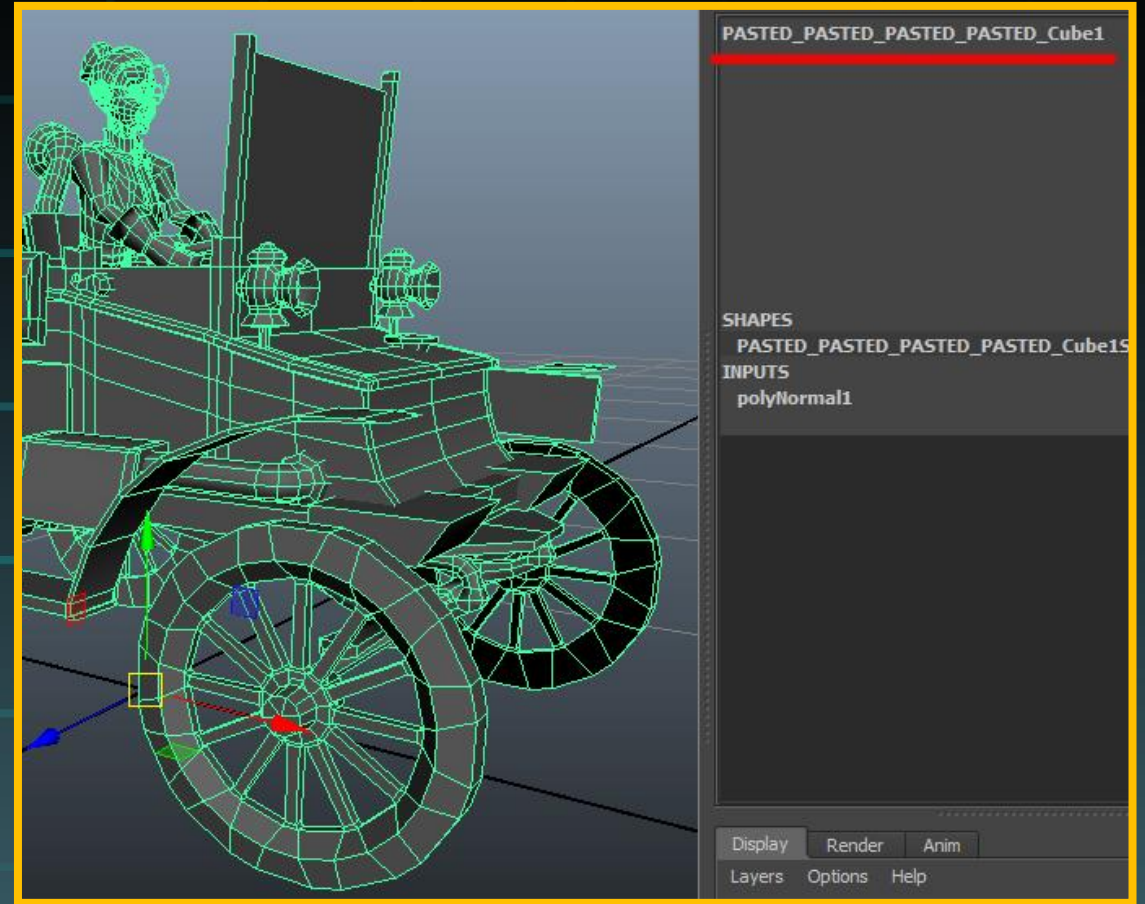


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Name Assets in Maya



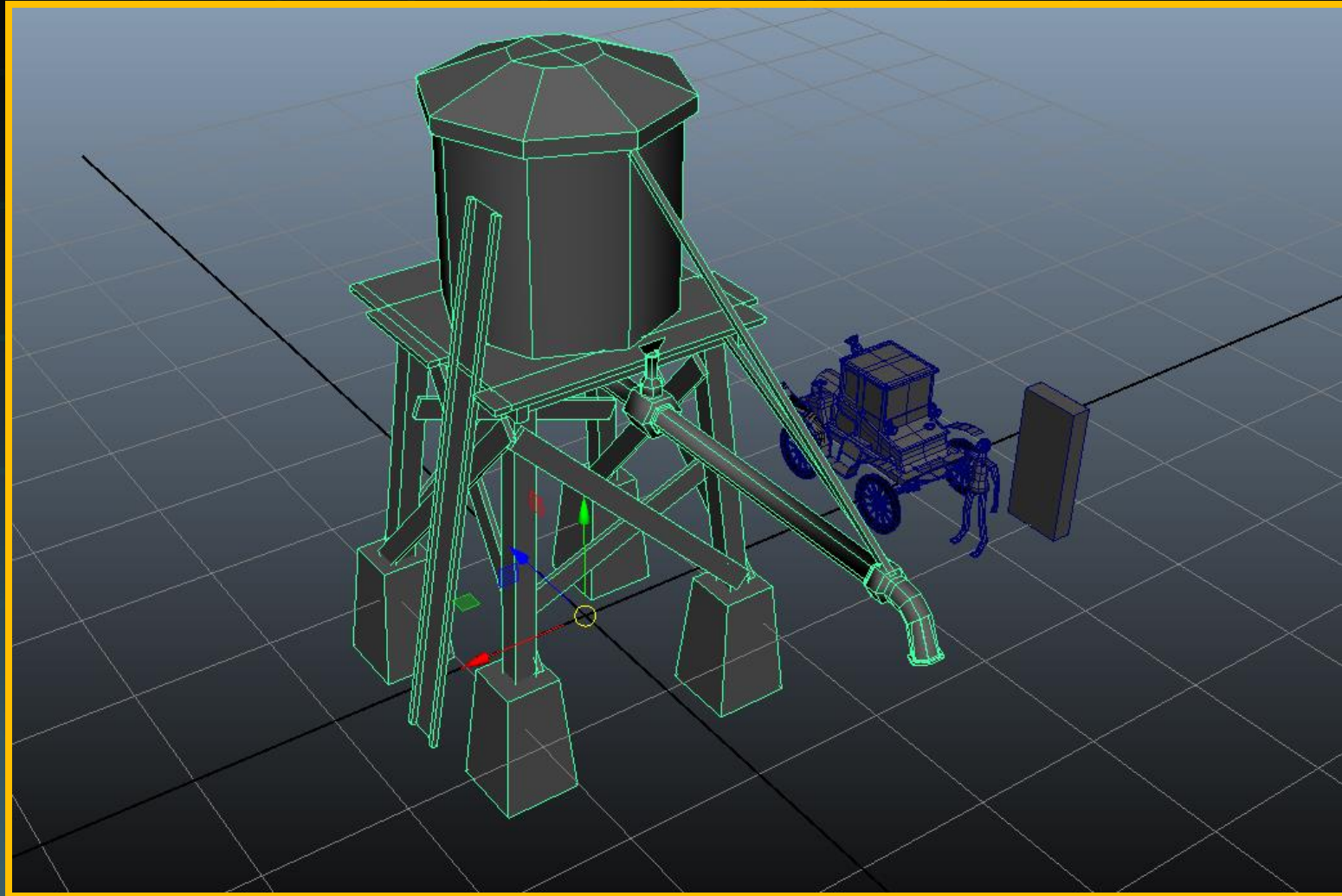
Do this...



Not this!

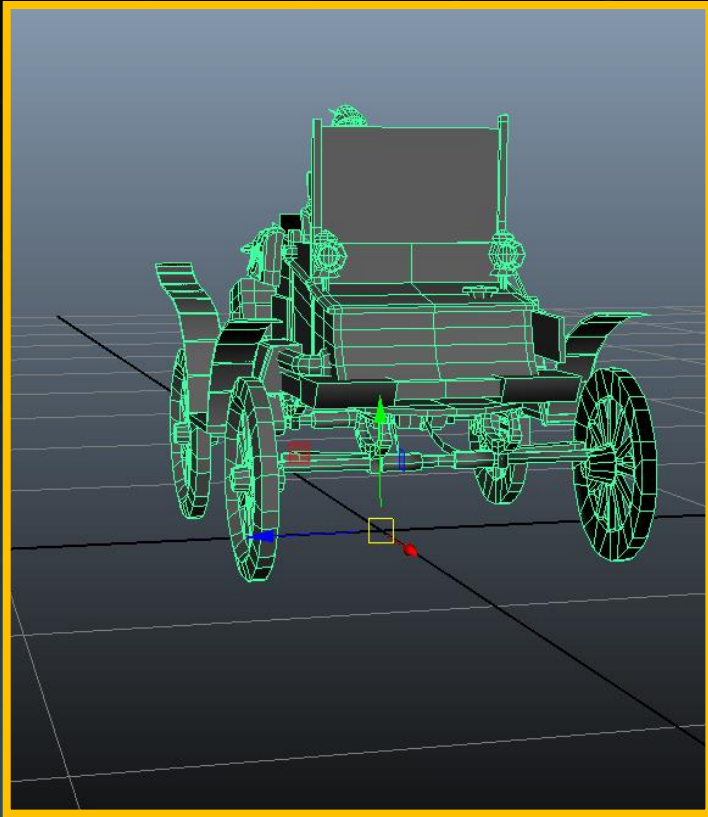
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Model at Centre of Grid (0,0,0)

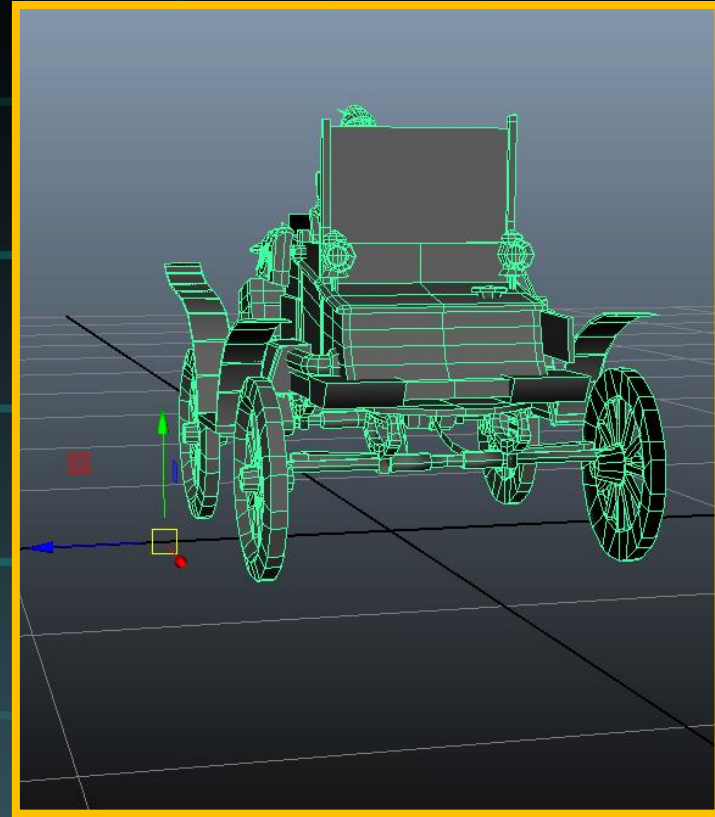


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Centre Pivot Points of models before exporting!



Do this...



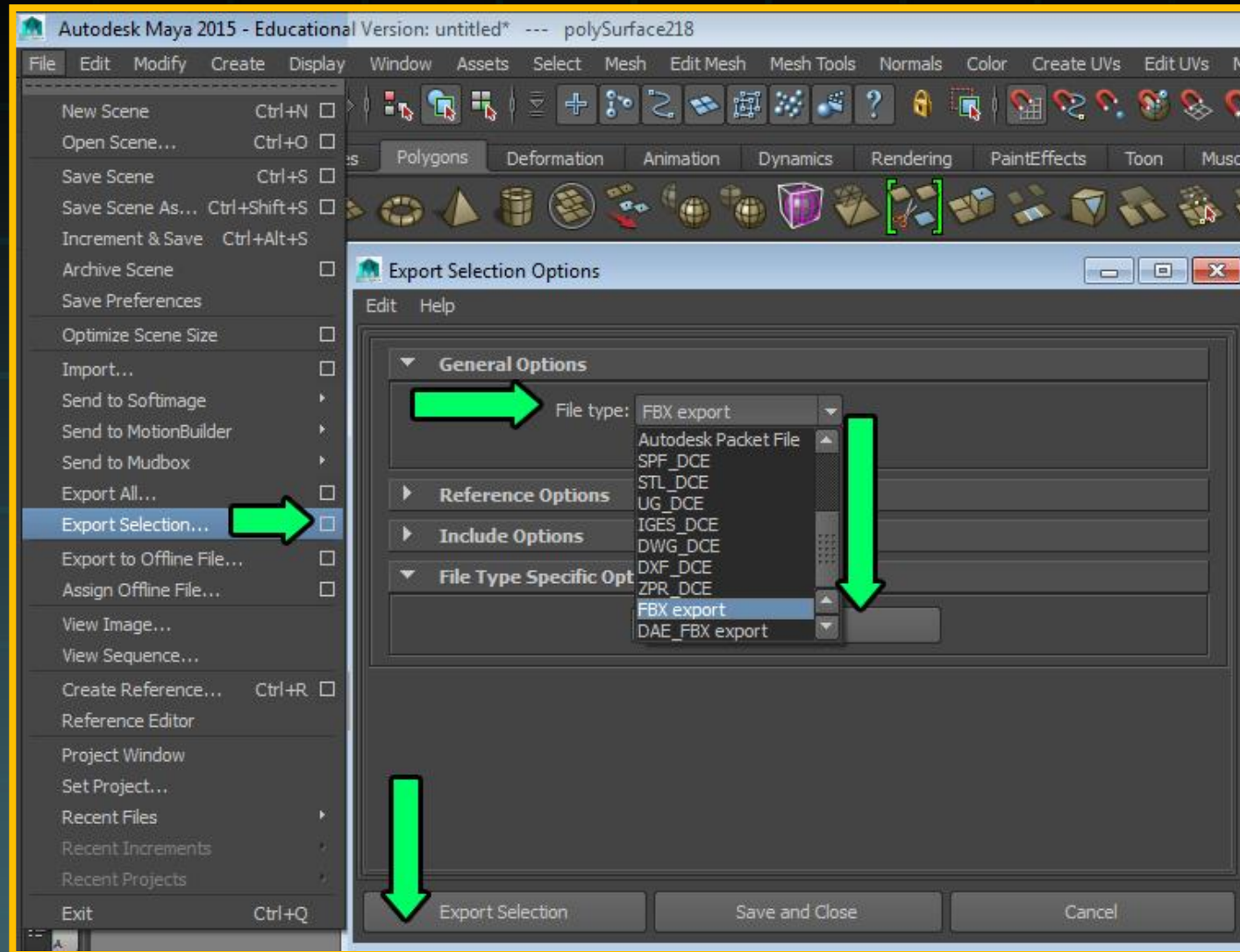
Not this!



= Move Pivot Point

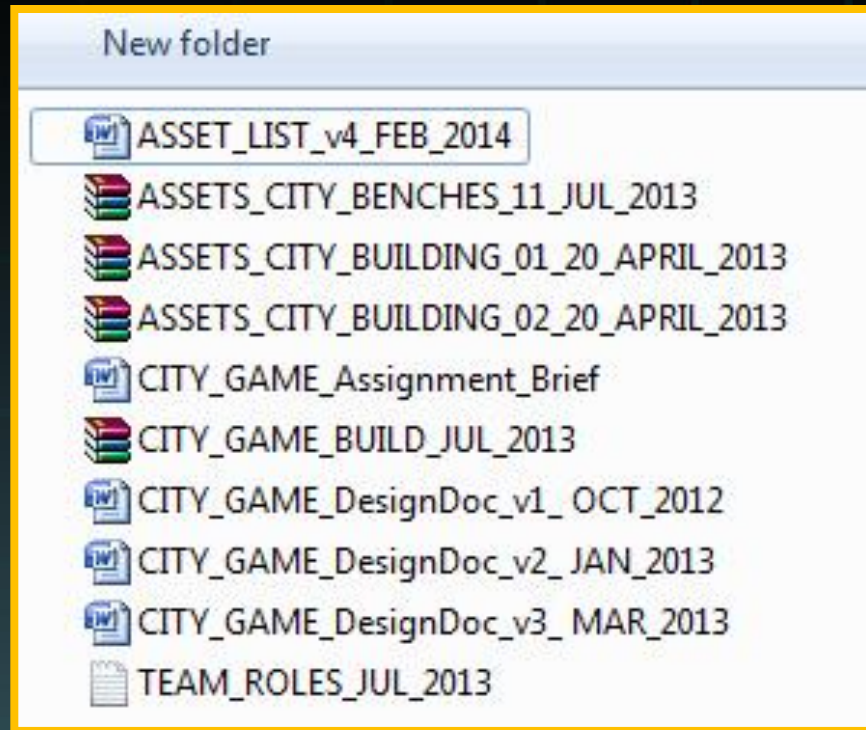
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Export as FBX

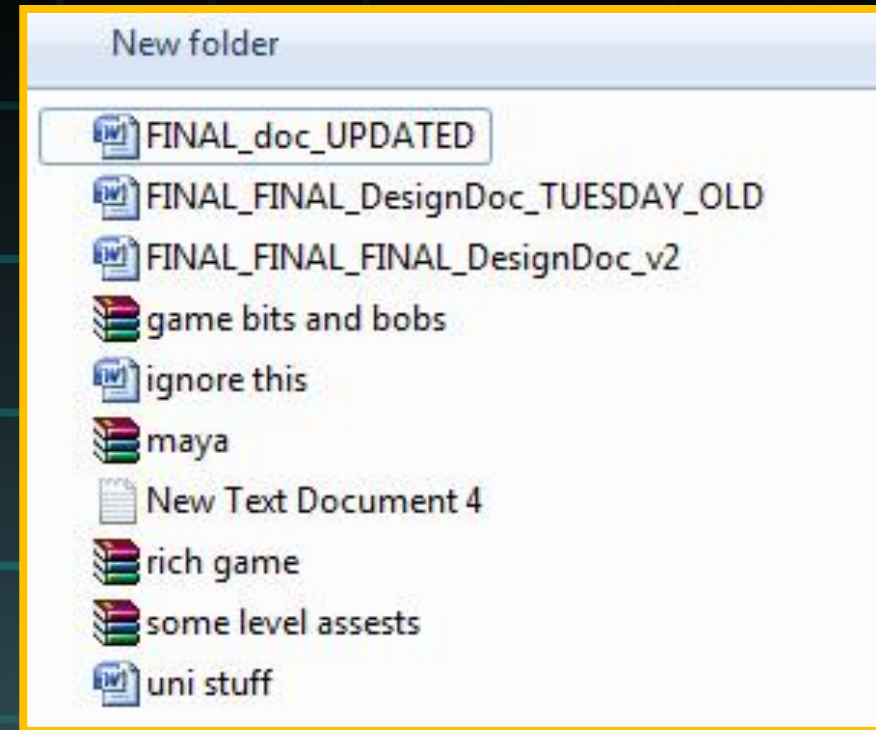


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Adhere to naming conventions at ALL TIMES



Do this...



Not this!

Decide **AS A TEAM** on the naming conventions on the project – and make sure **EVERYONE** sticks to them!

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Questions?



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Whiteboxing Exercise