Advanced Rendering Workflows in Fusion 360

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ROLLEIFLEX


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Outline

- Quick Tips
- More Advanced Workflows
  - Lights
  - Creating a scene
  - 3D Wood
  - Turntables
  - Motion Studies
  - Nested Dielectrics
- Feedback and Questions

Quick Tips

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  - Replace One Appearance with another
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  - Selection Sets
  - Creating a material
  - Named Views
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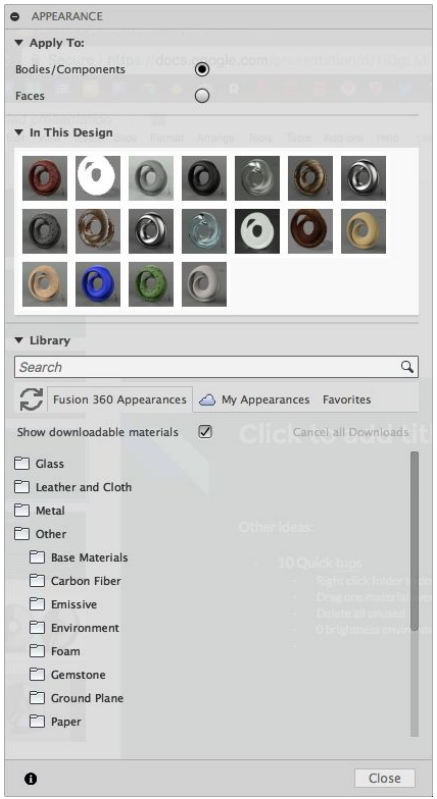
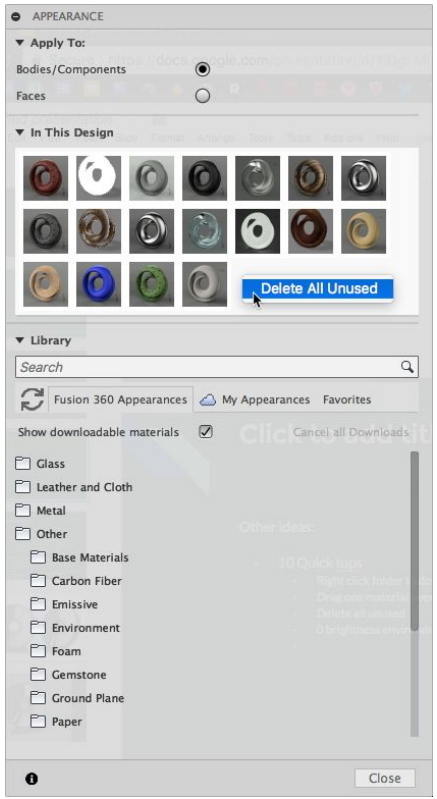
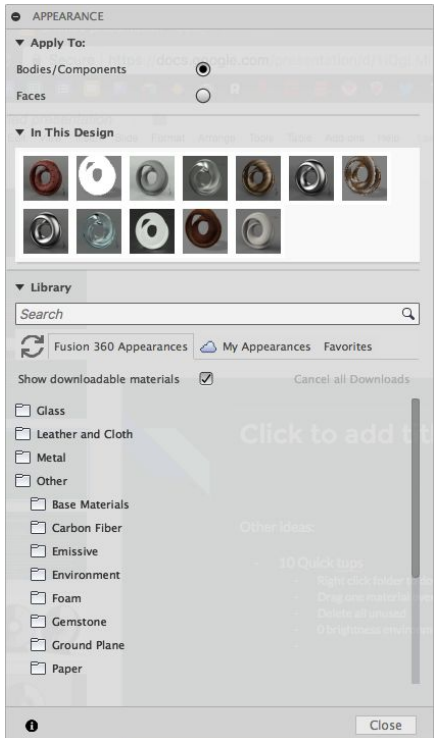
- Lights
  - Speaker
  - HDRs
  - Creating a scene
- 3D Wood
- Turntables
- Motion Studies
  - LMV Animations

Quick Tips

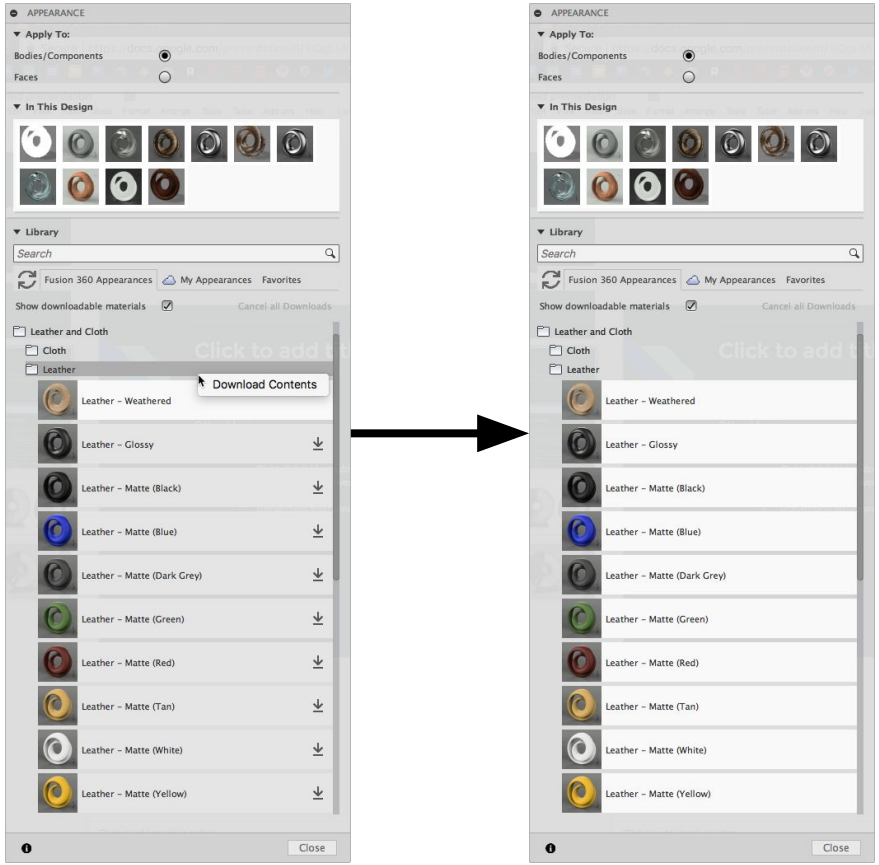
Delete All Unused



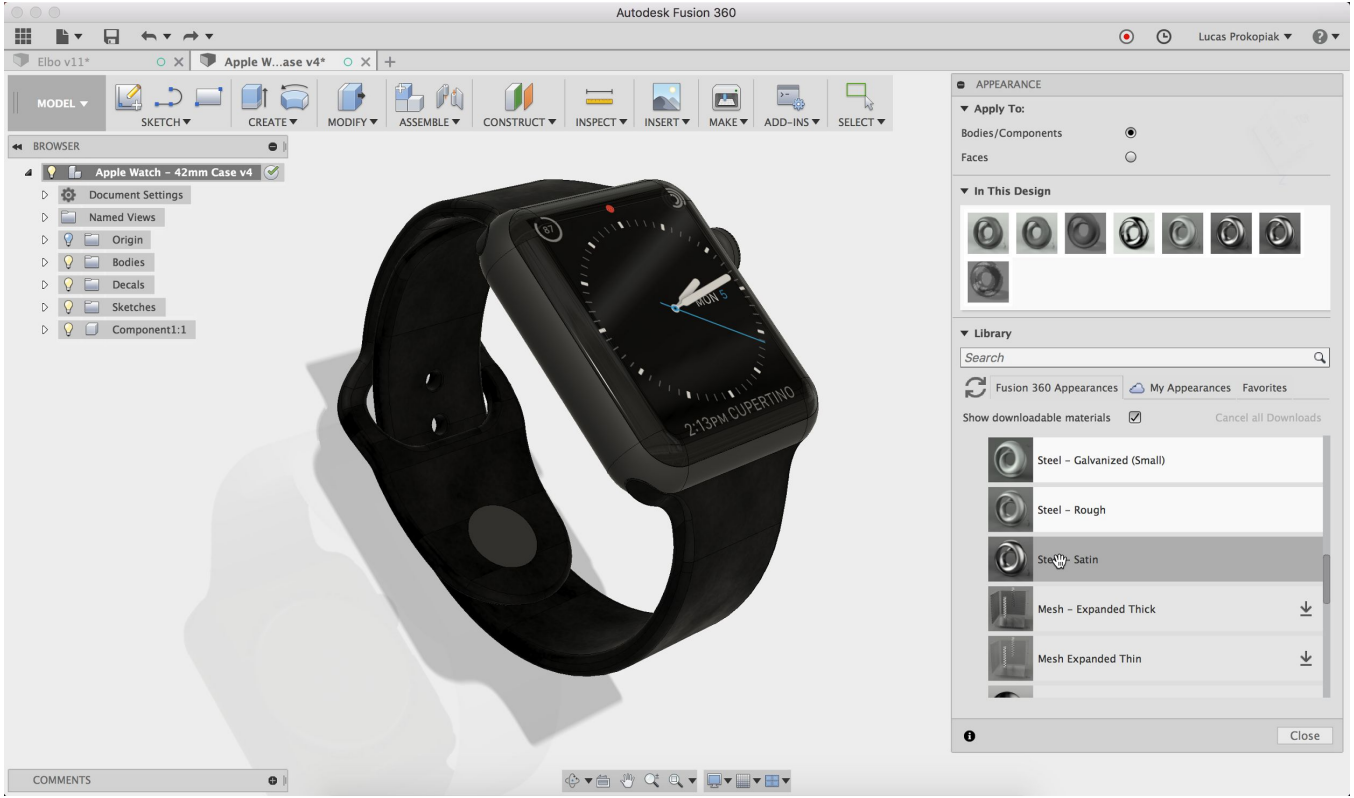




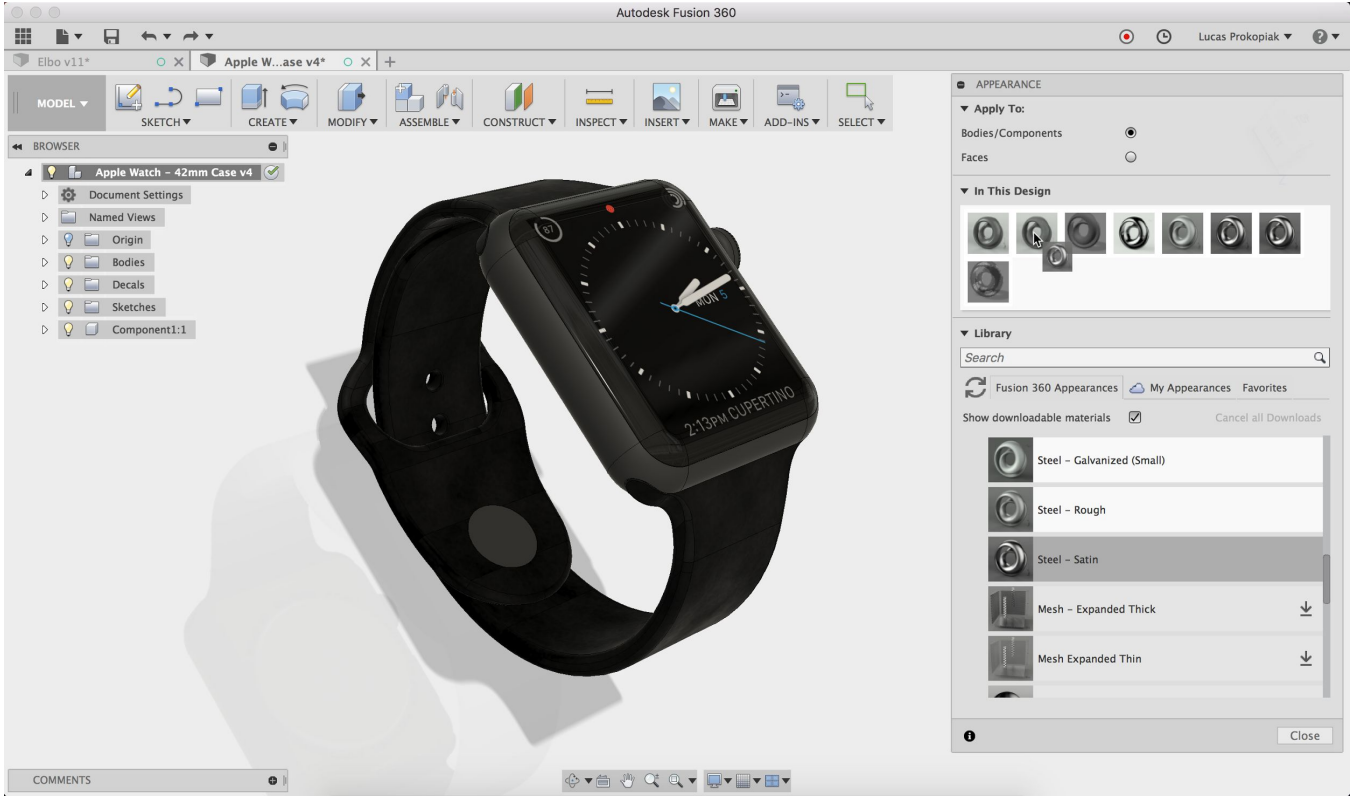
Download All Contents



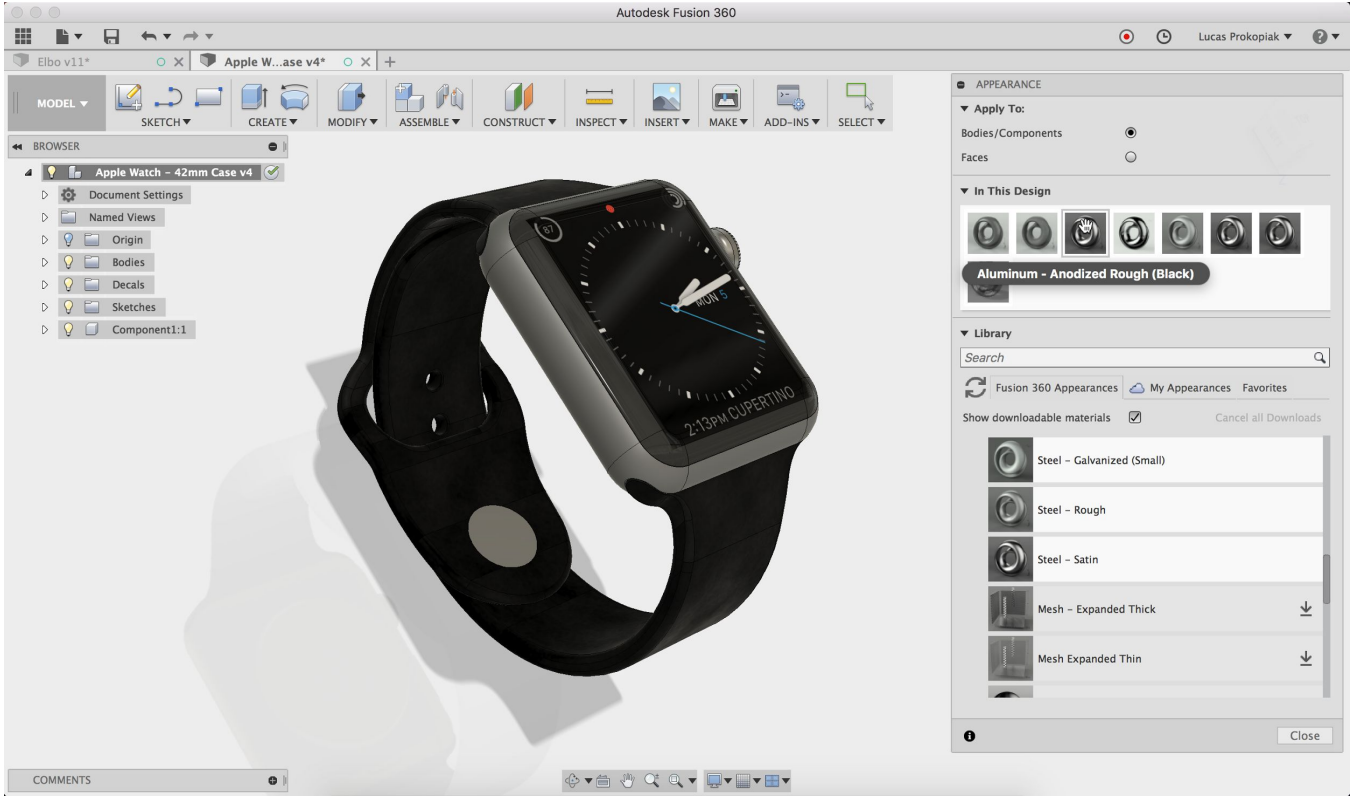
Replace One Appearance With Another - 1



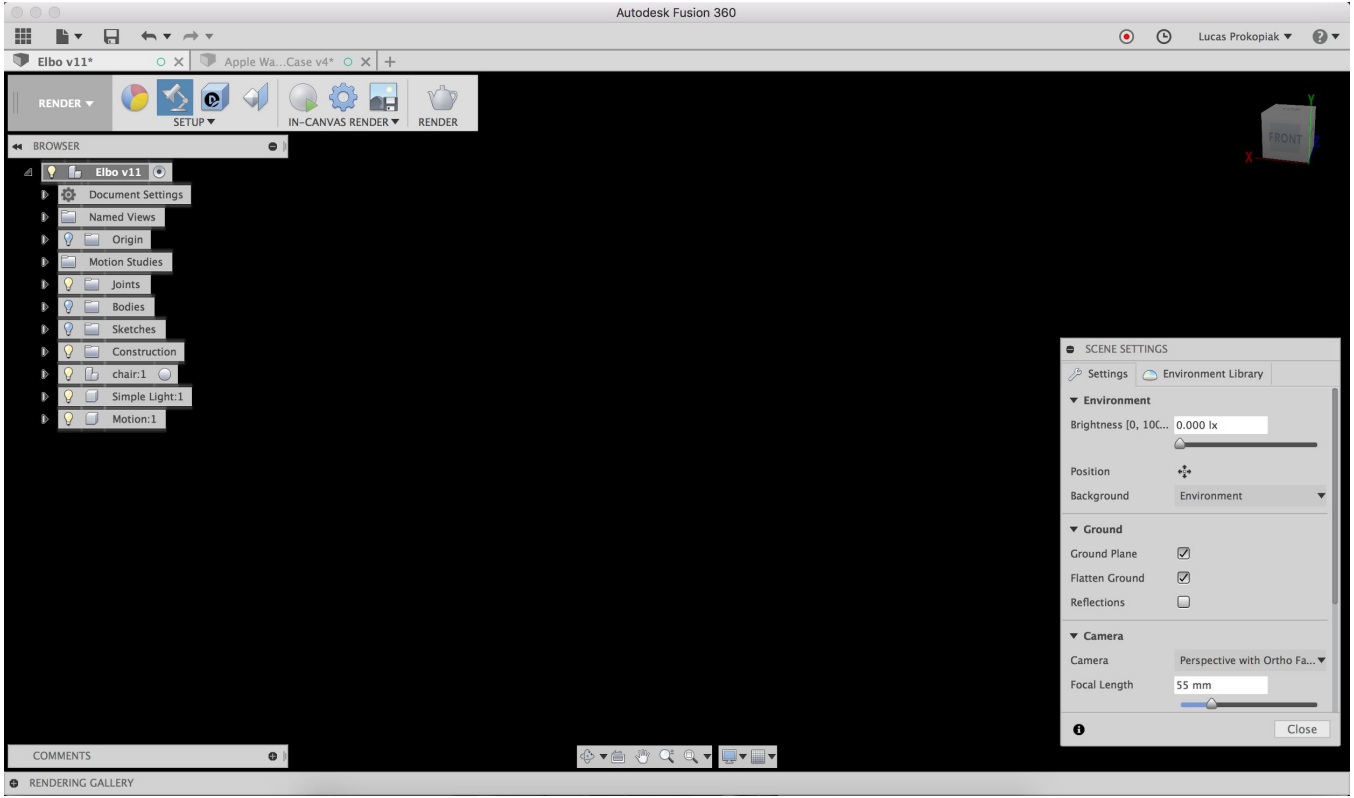
Replace One Appearance With Another - 2



Replace One Appearance With Another - 3



Turning Off the HDR Light



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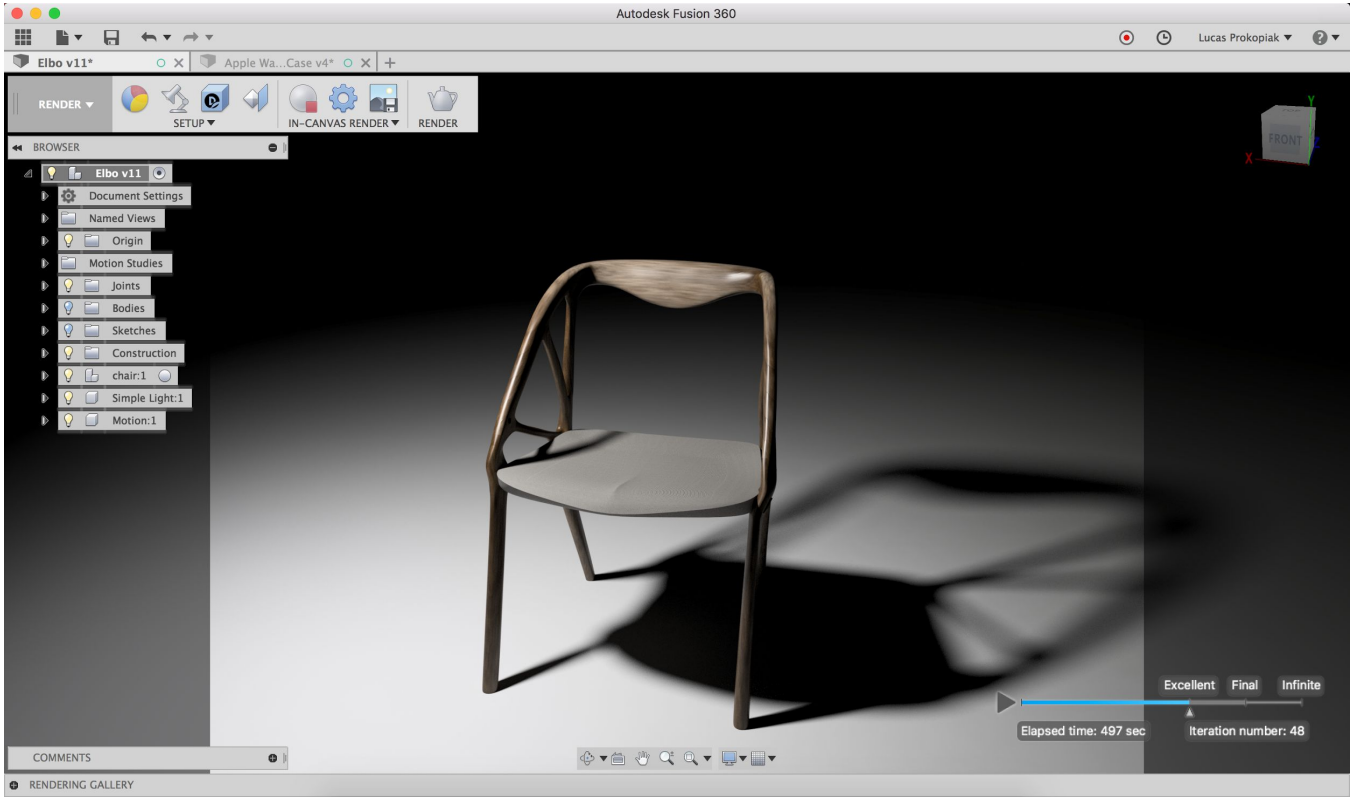
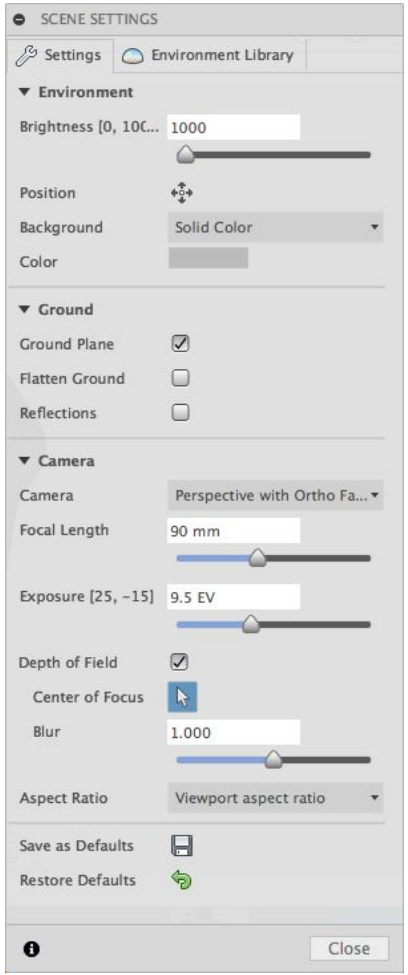
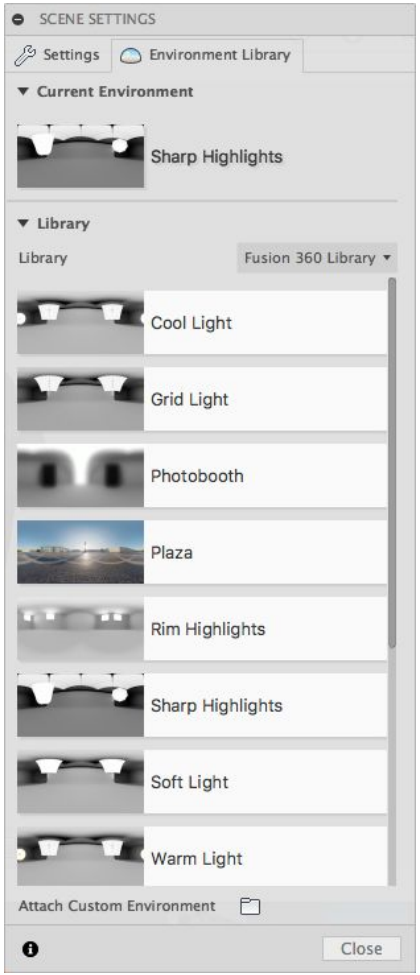


Scene Settings

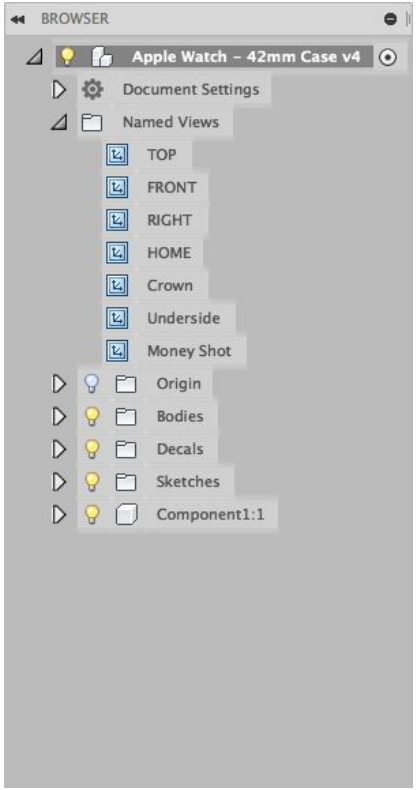
- Best Practices
  - Lower focal length is better to show perspective
  - Depth of Field Blur is aggressive above 0.2
  - Always turn on Aspect Ratio for better scene management





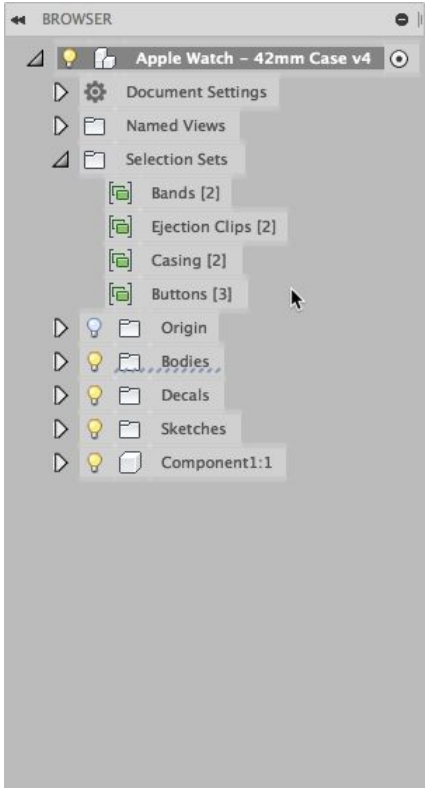
Named Views

- Best Practices
  - Keep the focal length constant between your named views
  - The perspective often differs from the modeling environment



Selection Sets

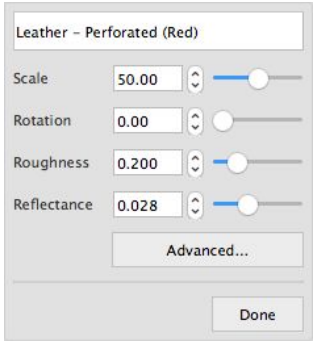
- Best Practices
  - Group bodies/components that are going to have the same appearances together
  - Name your selection sets

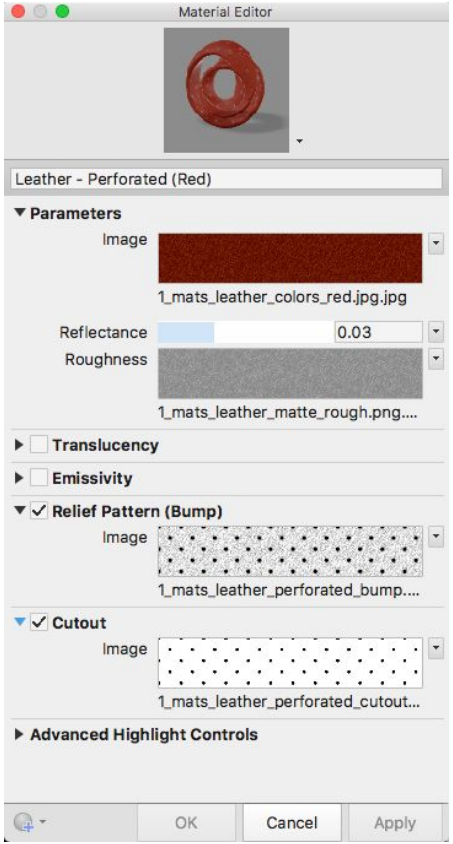


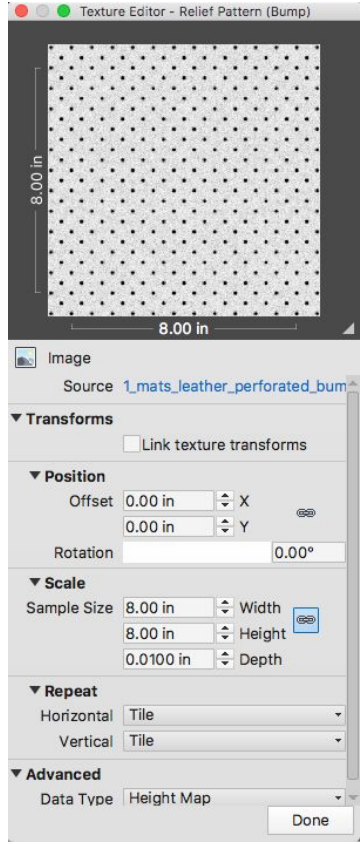
Material Editing

Material Editing

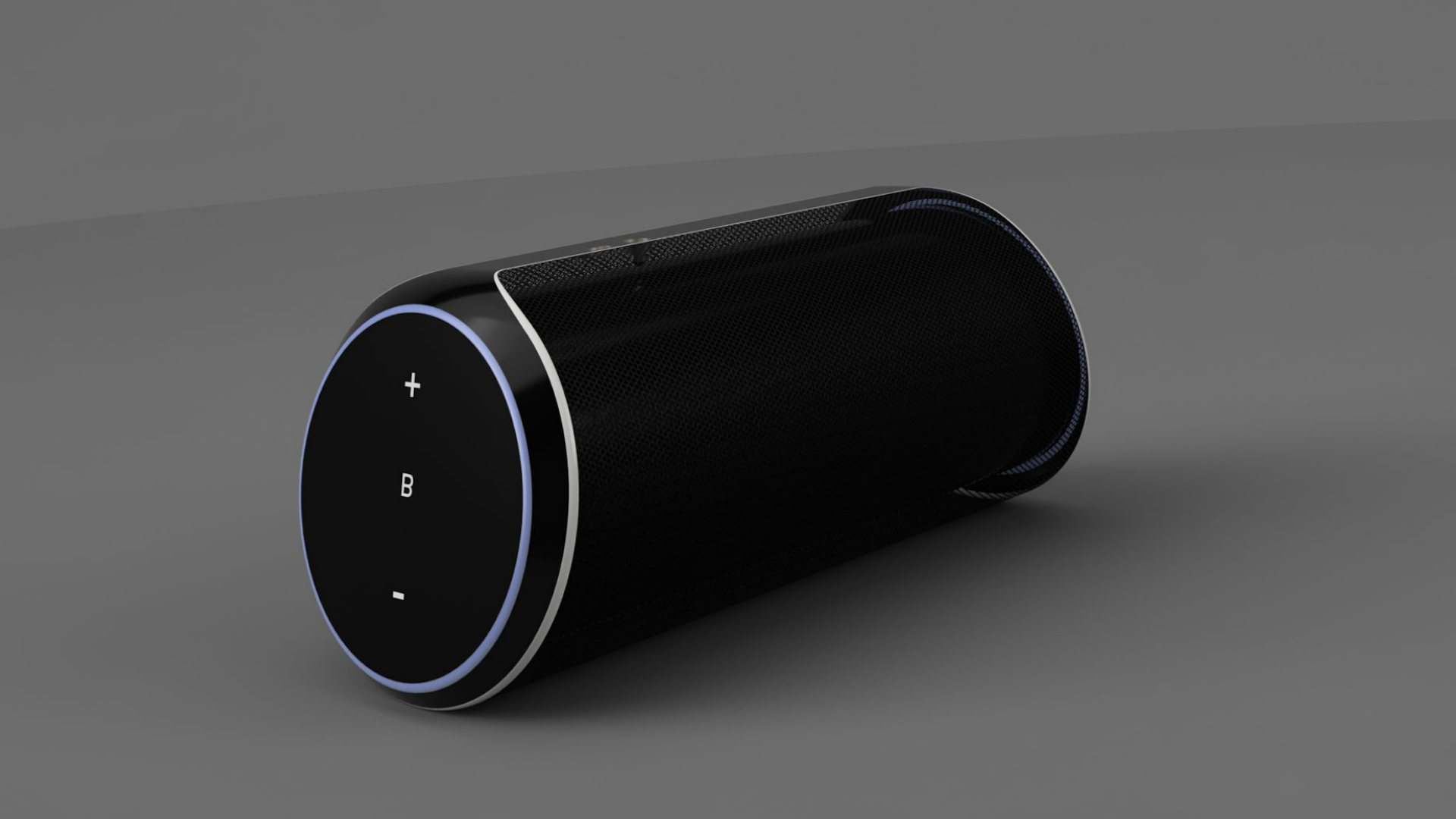
- Best Practices
  - 3 levels of editing
  - Relief patterns are what gives texture
    - Depth controls the amount - 0.01” or below is usually good
  - Color can be dictated by image or RGB








Lights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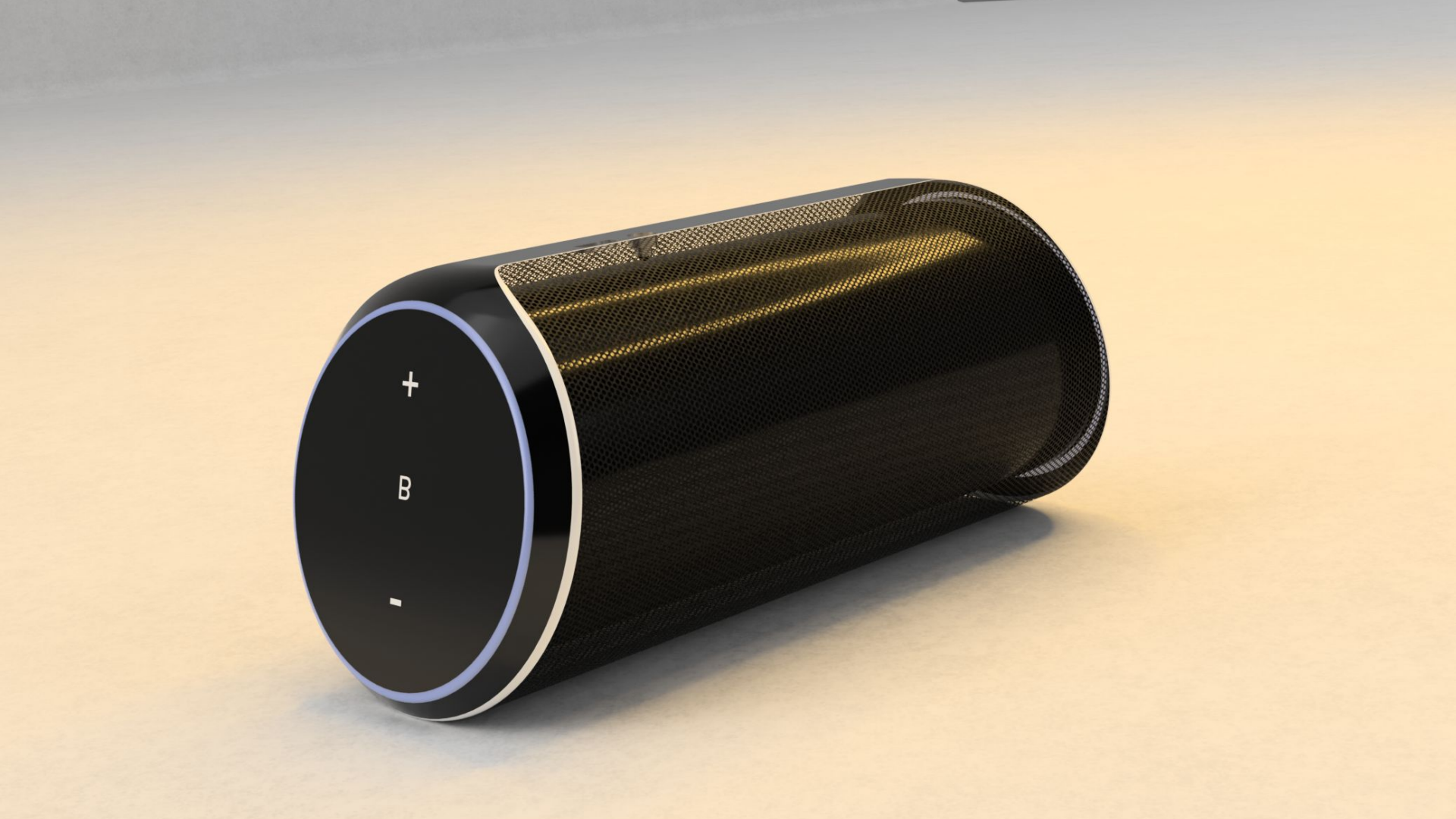
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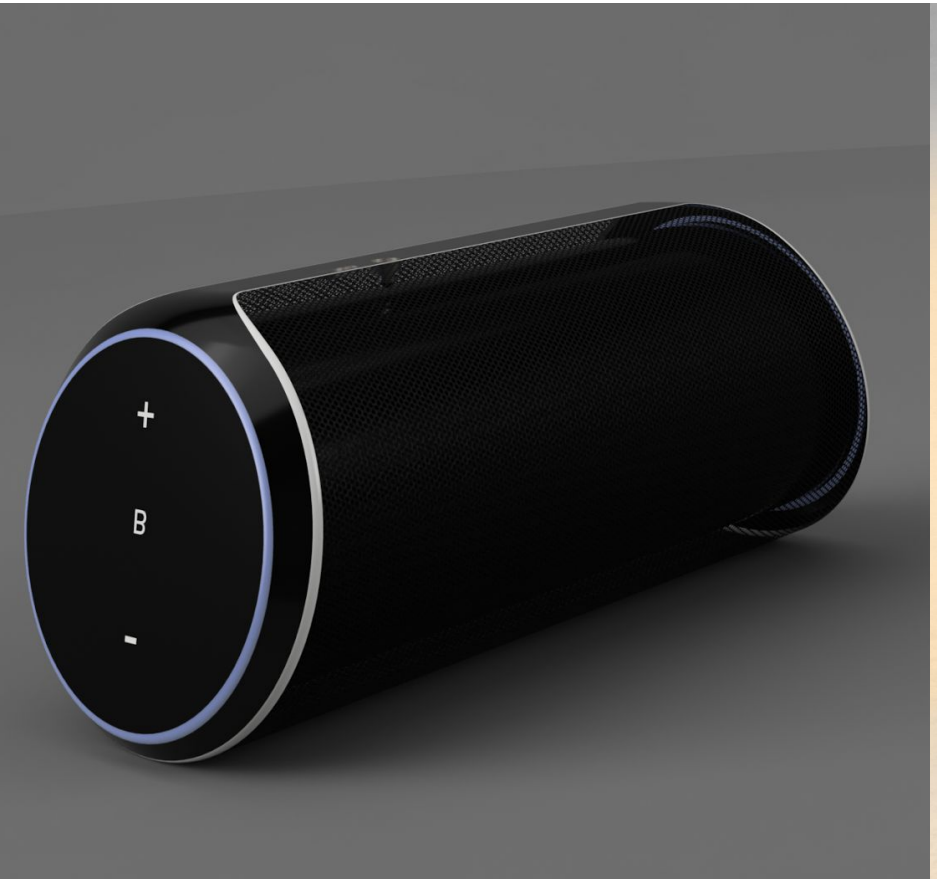
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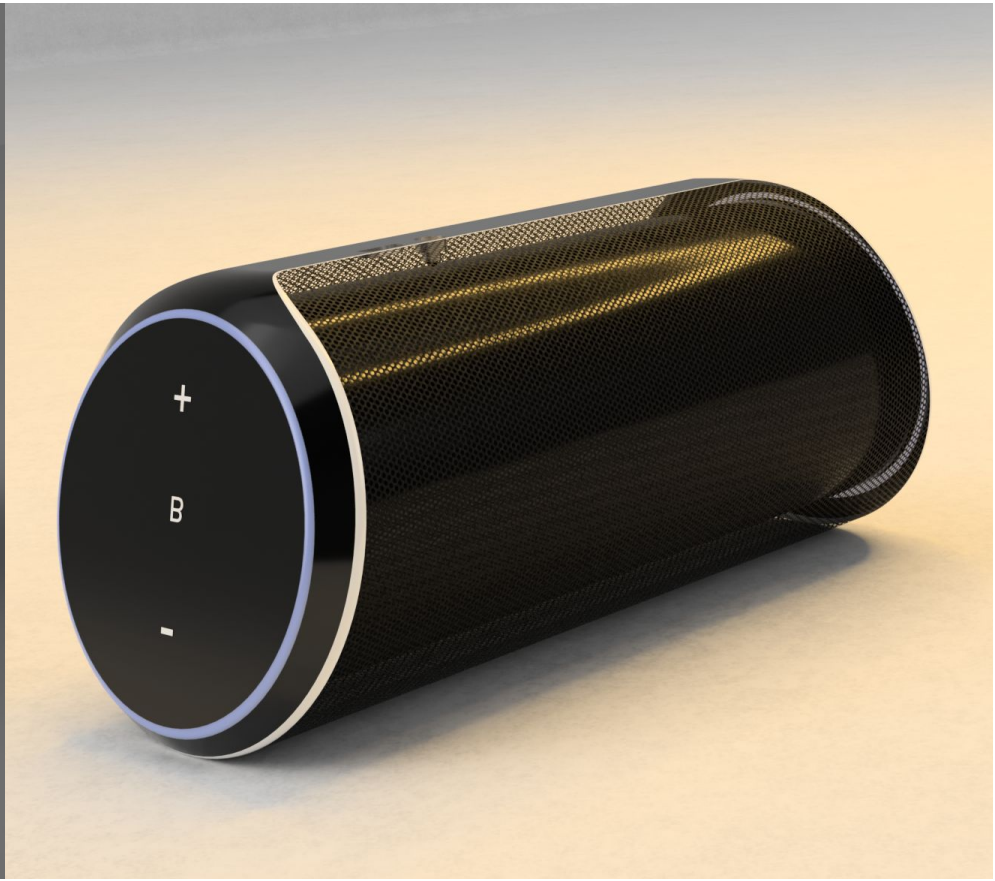
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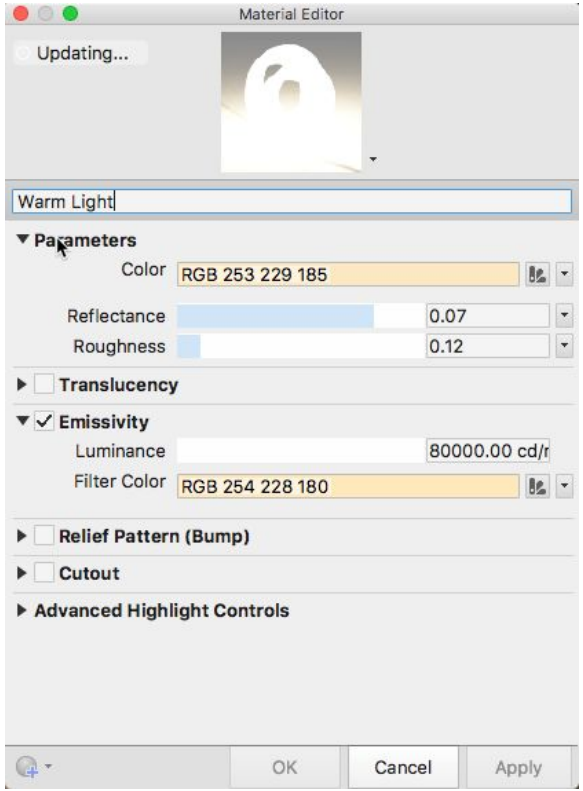
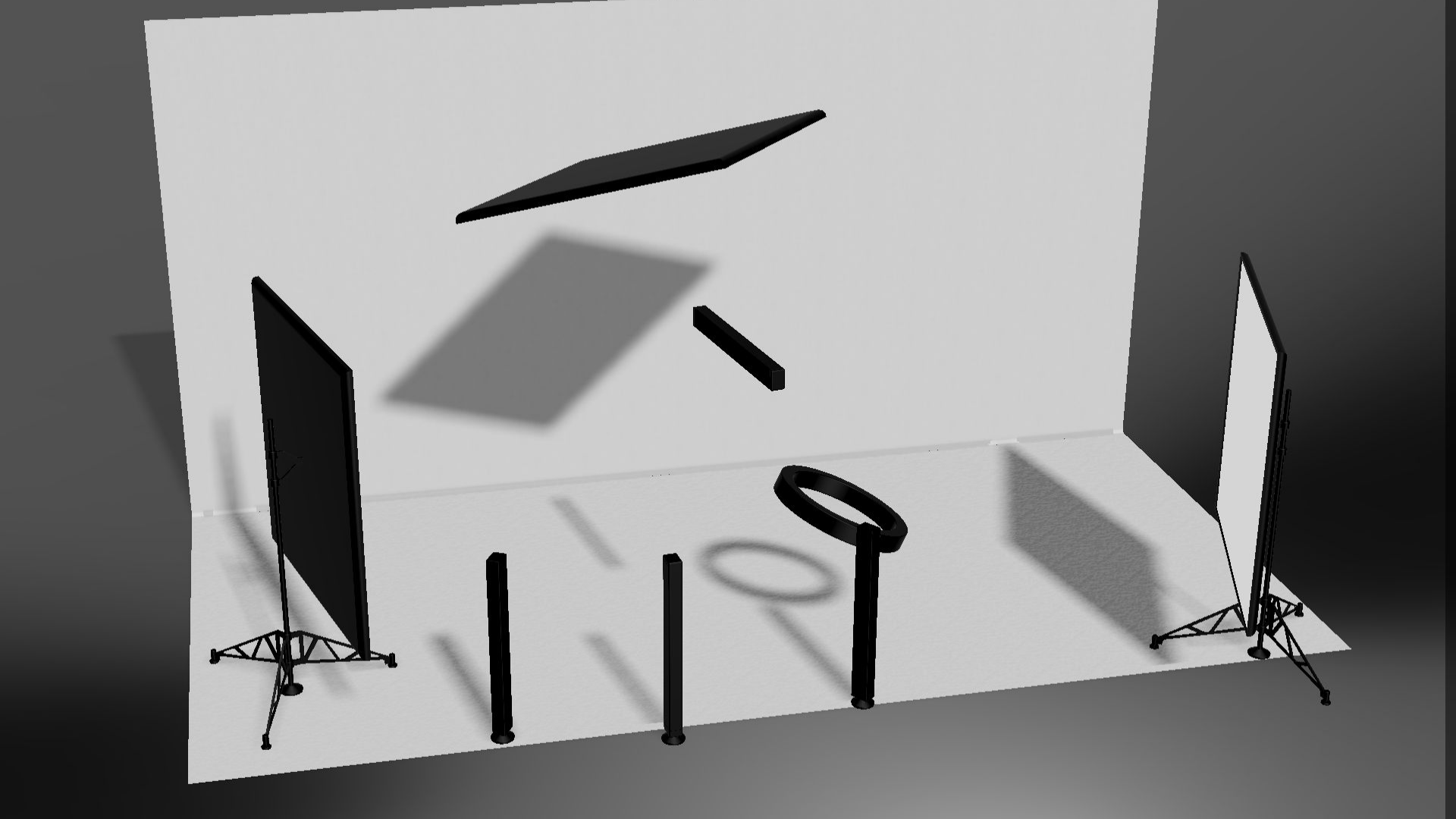
Lights

- Best Practices
  - Use “Fast” In-Canvas Render to quickly preview lighting effects
  - Use only one face to speed up render time
  - Create a color you like and save to Favorites





3D Wood

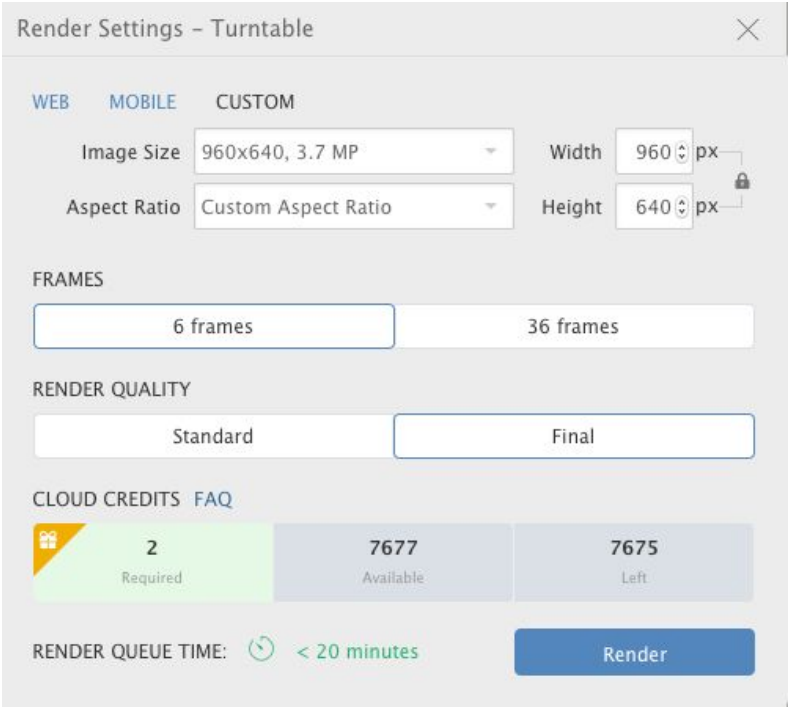
3D Wood

- Best Practices
  - Apply wood, then adjust texture mapping
  - Create bodies/components for each individual part to have realistic mating surfaces

Turntables

Turntables

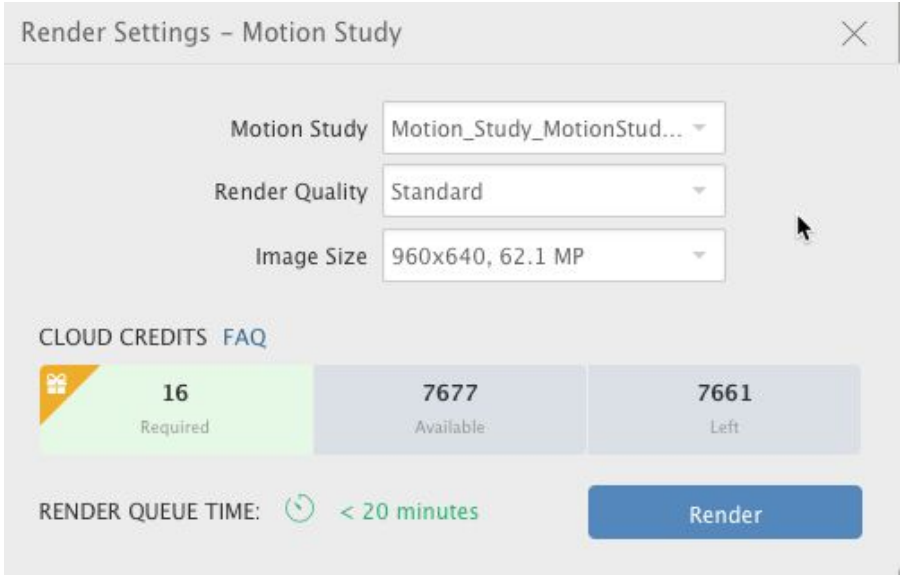
- Best Practices
  - Center of rotation is center of mass of ALL bodies in scene
  - Render a low res version first

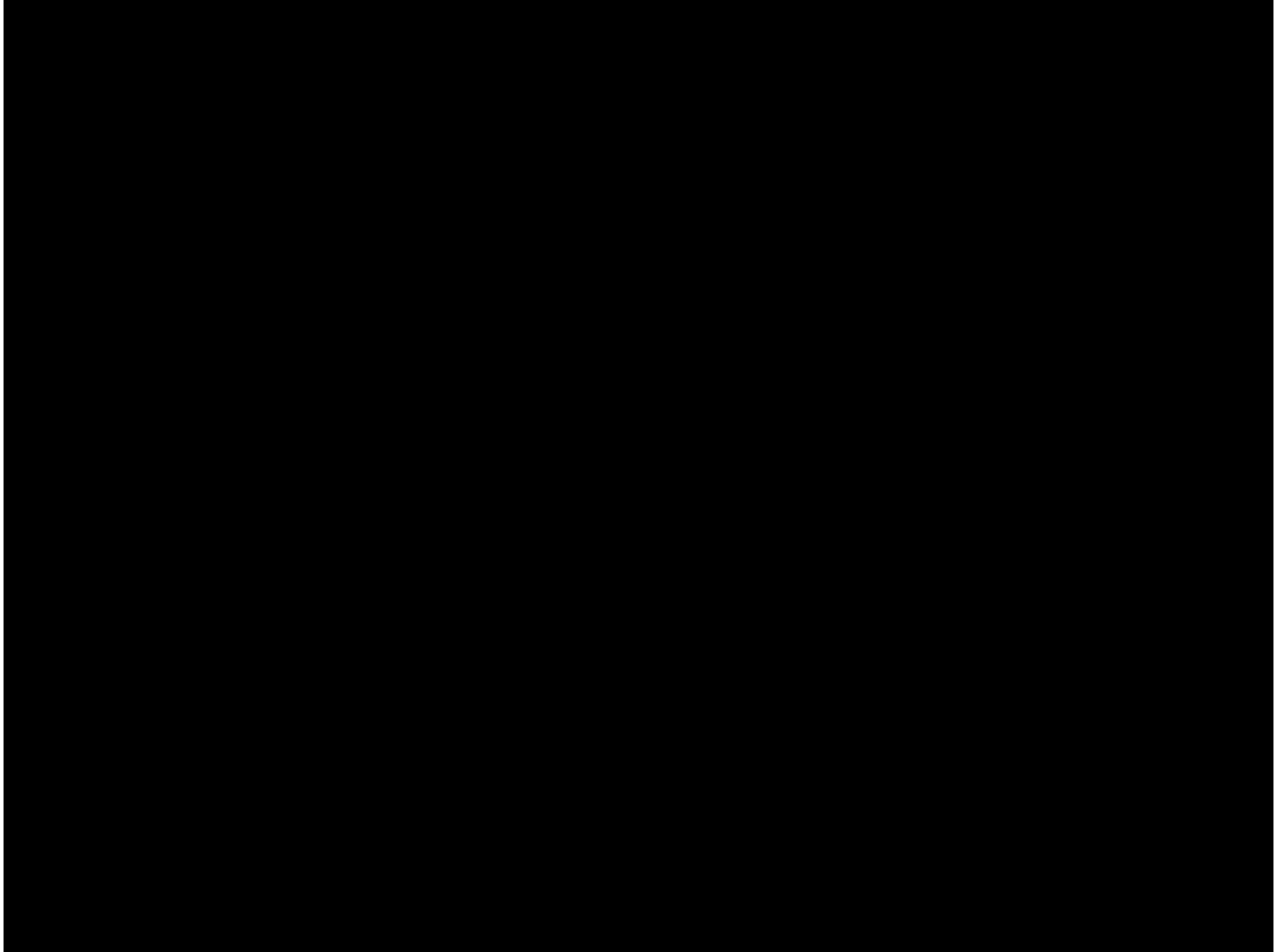


Motion Studies

Motion Studies

- Best Practices
  - Render a low res standard one first to make sure framing is correct
  - Name your motion studies
  - Create joints between root component to move camera





Nested Dielectrics

Nested Dielectrics

- Best Practices
  - Overlap geometries slightly
  - Lower priorities are deemed more important
  - In this case, the glass is 0, the ice is 1, and the liquid is 2


Questions and Feedback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ANY QUESTIONS?
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