12 – texture mapping

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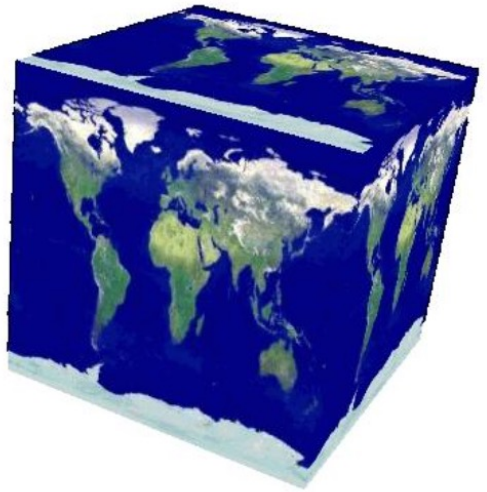
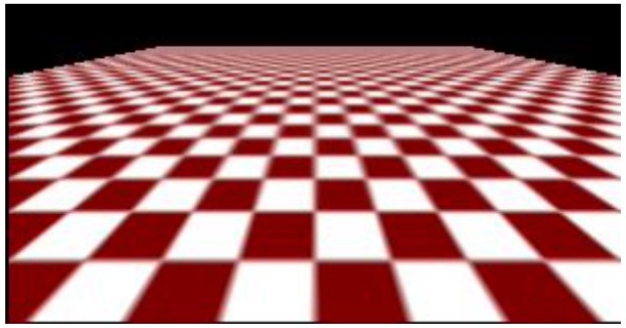
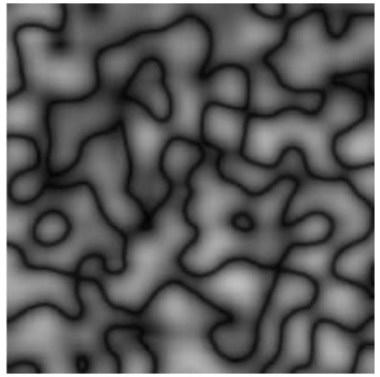
Texture Mapping



- A way of adding surface details
- Two ways can achieve the goal:
  - Surface detail polygons: create extra polygons to model object details
    - Add scene complexity and thus slow down the graphics rendering speed
    - Some fine features are hard to model!
  - ✓ Map a texture to the surface (a more popular approach)





Complexity of images does
Not affect the complexity
Of geometry processing
(transformation, clipping…)

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Examples

Look at threejsfundamentals.org

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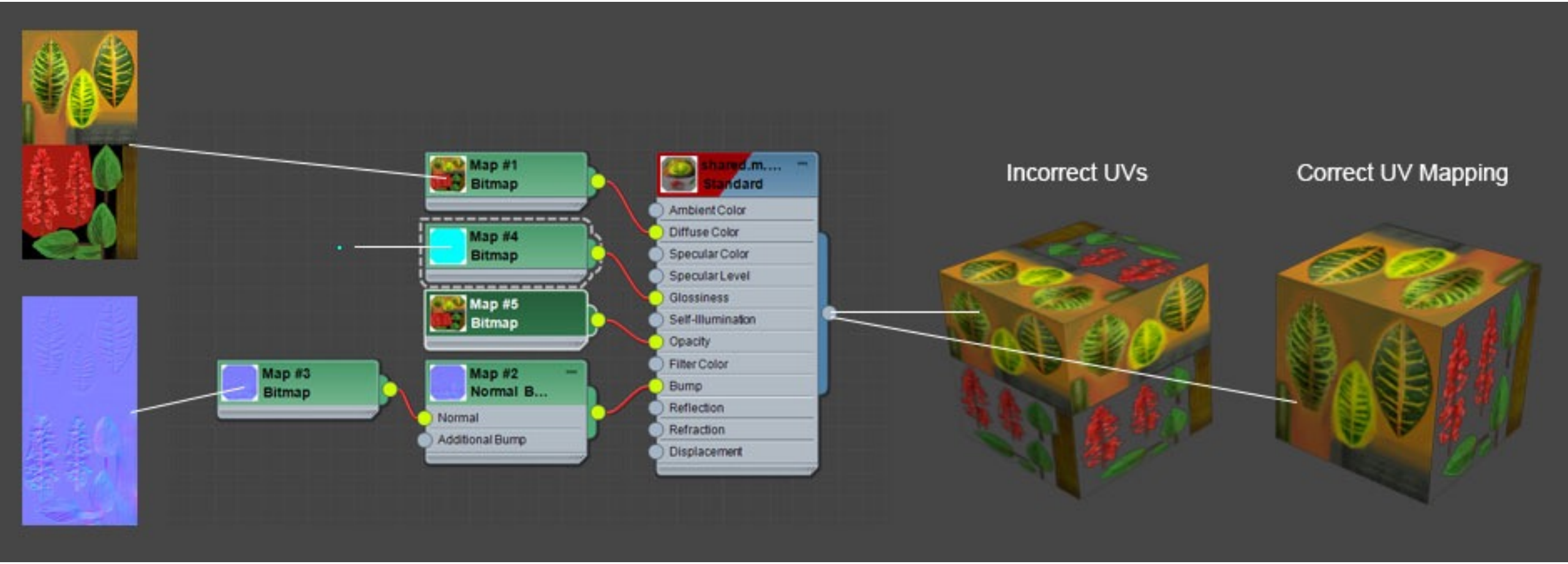

https://online.ts2009.com/mediaWiki/index.php/Texture_Atlas

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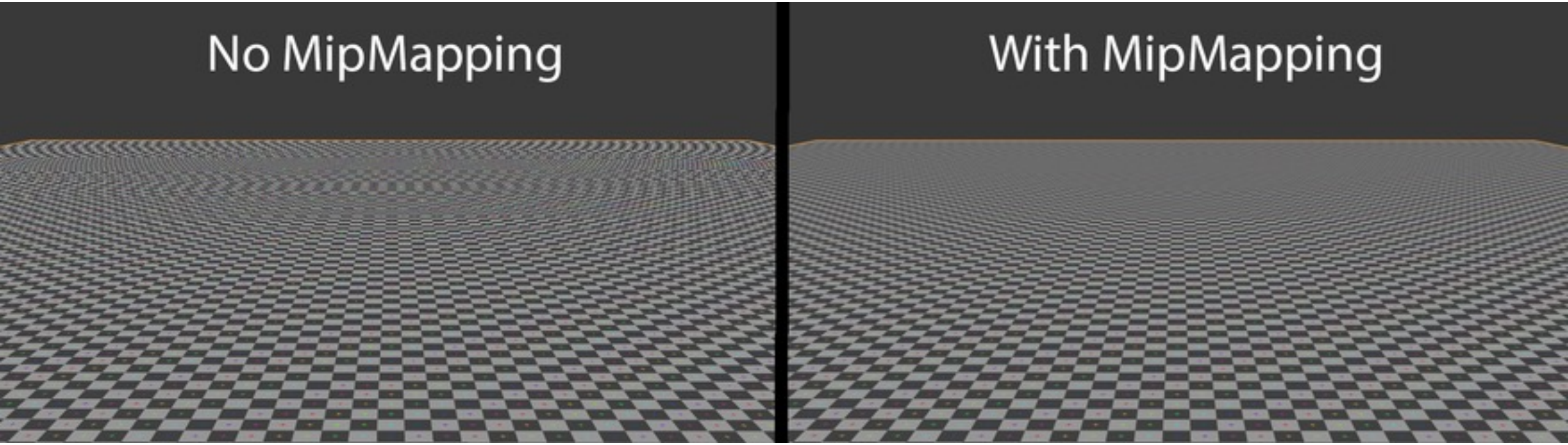
MIPMAP examples



https://www.wikiwand.com/en/Mipmap

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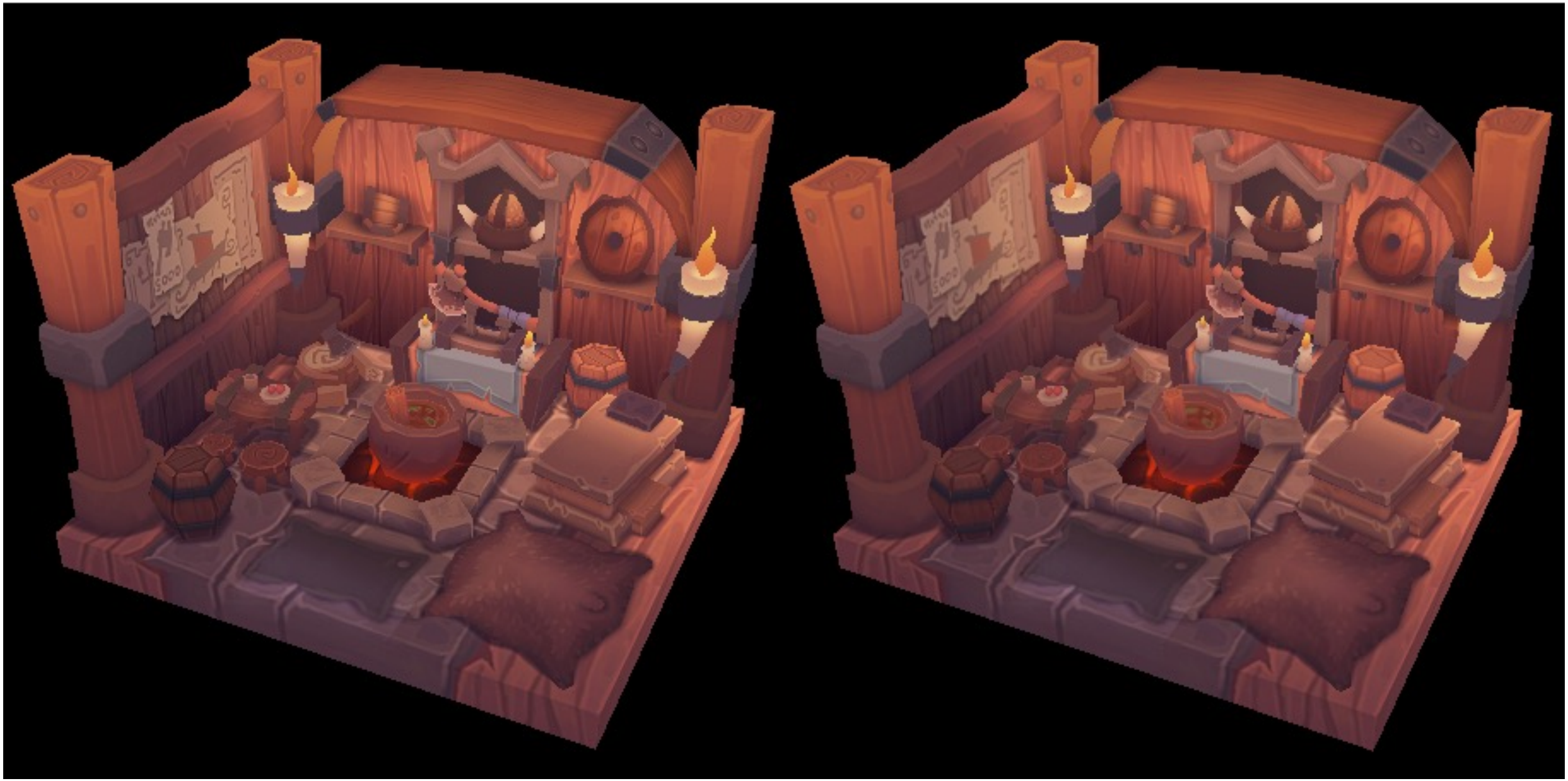
https://vulkan-tutorial.com/Generating_Mipmaps

Without mipmaps

With mipmaps