**Tinkercad Keyboard Shortcuts**

## ****KEYBOARD SHORTCUTS****

**Workplane**: ‘**W**‘ Press W to place workplane

**Ruler**: ‘**R**‘ Press F to place ruler

**Fit view to selection**: ‘**F**‘ Press F to fit the view on selected object

**Copy**: Press ‘**ctrl/cmd’** + ‘**C**‘ to copy selected object/objects

**Paste**: Press ‘**ctrl/cmd**‘ + ‘**V**‘ to paste object/objects

**Paste in place**: Press ‘**ctrl/cmd**‘ + ‘**shift**‘ + ‘**V**‘ to paste object/objects

**Undo**: Press ‘**ctrl/cmd**‘ + ‘**Z**‘ to undo

**Redo**: Press ‘**ctrl/cmd**‘ + ‘**shift**‘ + ‘**Z**‘ to redo

**Group**: Press ‘**ctrl/cmd**‘ + ‘**G**‘ to group objects

**Ungroup**: Press ‘**ctrl/cmd**‘ + ‘**shift**‘ + ‘**G**‘ to ungroup objects

**Duplicate in place**: Press ‘**ctrl/cmd**‘ + ‘**D**‘ to duplicate selection in the same place

**Lock**: Press ‘**ctrl/cmd**‘ + ‘**L**‘ to lock selection

**Select all**: Press ‘**ctrl/cmd**‘ + ‘**A**‘ to select all objects

**Delete**: Press ‘**backspace**‘ to delete object

## Moving selection

**Move on workplane**: ‘**all arrows**‘, Nudge selection on workplane (x&y-axis)

**Move up & down**: ‘**ctrl/cmd**‘ + ‘**up&down arrows**‘, Nudge selection up & down (z-axis)

**Move x10 on workplane**: ‘**shift**‘ + ‘**all arrows**‘ Nudge selection 10 x snap on workplane (x&y-axis)

**Move x10 up & down**: ‘**ctrl/cmd**‘ + ‘**shift**‘ + ‘**up&down arrows**‘ Nudge selection 10 x snap up & down (z-axis)

## **Keyboard Shortcuts with Mouse**

**Duplicate**: Hold ‘**alt**‘ while starting to move to duplicate selection

**Select multiple objects**: Hold ‘**shift**‘ + ‘**left mouse button**‘ to select multiple objects

**45°-step rotation**: Hold ‘**shift**‘ while rotating to constrain rotation to 45 degree steps

**1D scale**(center of the object): Hold ‘**alt**‘ while scaling object from side handle to scale proportionally on one direction

**2D scale**(center of the object): Hold ‘**alt**‘ while scaling object from corner handle to scale proportionally on two direction

**3D scale** (opposite corner): Hold ‘**shift**‘ while scaling object from corner handle to scale proportionally on all directions

**3D scale** (bottom center of the object): Hold  ‘**shift**‘ + ‘**alt**‘ while scaling object from corner handle to scale proportionally on all directions

**3D scale** (center of the object): Hold ‘**shift**‘ + ‘**alt**‘ while scaling object from top handle to scale proportionally on all directions

**Pan view**: Hold ‘**shift**‘ + ‘**right mouse button**‘ to view panoramic

## Tips for Getting Started with Tinkercad

1. Sign up to create an account – it is free and will allow you to save your projects
2. Start with the Tinkercad “Learn” area which supplies step by step lessons to learn how the environment is set up and how the tools work
3. Copy & Tinker – visit the gallery, see something you like, and select the Copy & Tinker option to bring it into your workspace where you can modify it
4. Learn how to create a design from start to finish by following tutorials such as the one featured on the Tinkercad 3D Design Blog (also located in Reference Materials on the USB drive)
5. Practice often – the more you play with the interface the more comfortable you will get
6. If you learn well from Videos, try the Autodesk Tinkercad channel on YouTube
7. Use the community forum and knowledge base – <https://tinkercad.zendesk.com/hc/en-us>