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 to create a design from start to finish by following the tutorials such as the one featured on the Tinkercad 3D Design Blog

5. Visit the Autodesk Tinkercad channel on YouTube.

6. Use the community forum and knowledge base – http://tinkercad.zendesk.com/hc/en-us

7. Practice, Practice, Practice

Tinkercad Shortcuts

KEYBOARD SHORTCUTS

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

Ruler: '**R**' Press R 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