3D Printing

Apps & Websites that can be used: (For more info please visit http://lcps.org/Page/167687)

TinkerCAD – This is an online program that takes some skill and learning, but students can create anything they imagine! (www.tinkercad.com)

Printshop – This app is especially made for the Makerbot printer. This app can be used to create static objects such as bracelets, badges, rings, vases, and words BUT can also be used in its "Shape Maker" setting which takes a picture of a student's black and white drawing and print it in 3D.

Revolved 101 – This app makes circular shapes and works with a line of symmetry.

Blokify –This app plays just like Minecraft with blocks and building!

3D Creationist – This app is a simpler TinkerCAD… students are given a choice of pre-set shapes to build, create, and combine. Students can create their choice of projects to create a final design.

Tinkerplay – This app is great for creating figures with pre-set body parts. Students get to choose body parts to create their own action figures.
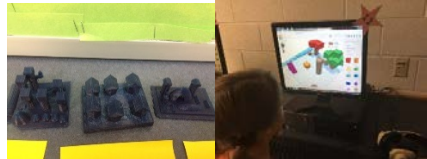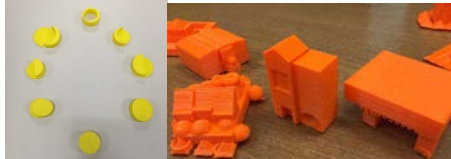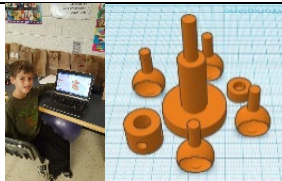
123D Design – This app works like TinkerCAD but on a mobile device! Students can take basic shapes and stretch, shrink, and create to their heart's content!

	SOL	Common Core	Project Idea	3D Printer App/Site	Examples at Liberty
K	MATH K.2d MATH K.11 & K.12 MATH K.16	CCSS.ELA.K.1.1.1 CCSS.MATH.K.4.2 & K.4.1 CCSS.MATH.K.4.1	Position/motion/movement Plane/geometric figures Patterns	Tinkerplay Blokify/3D Creationist 3D Creationist/Printshop	
1st	SCI 1.5b SS 1.11 MATH 1.4 & 1.7a MATH 1.20 & 1.21 MATH 1.10 a&b	CCSS.SCI.1.2.2.a&c CCSS.SCI.1.2.2.b & c CCSS.MATH.1.2.1 & 1.4.1 CCSS.MATH.1.1.1.Cii	Adaptations Patriotic symbols Plants Patterns Piggy Banks & Money	Tinkerplay Printshop w/ b&w draw Printshop w/ b&w draw Printshop w/ b&w draw TinkerCAD/123D Design	
2nd	MATH 2.8 & 2.17 SCI 2.5b SS 2.2 SCI 2.6	CCSS.MATH.2.3.1.a CCSS.SCI.2.2.1 & 2.2.2 CCSS.SS.2.1.2 CCSS.SCI.2.3.1	Bar Graphing Habitats Native American Homes Extreme Weather Homes	Blokify TinkerCAD/123D Design TinkerCAD/123D Design TinkerCAD/123D Design	
3rd	SCI 3.4 SCI 3.6 SCI 3.8 SS 3.1 & 3.2 & 3.4 & 3.5 MATH 3.9 & 3.10	CCSS.SCI.3.2.1a CCSS.SCI.3.2.1 CCSS.SCI.4.3.1* CCSS.SS.3.1.2 CCSS.MATH.3.4.2.c	Adaptations Habitats Moon Phases Ancient Civilizations Area & Perimeter Floor Plans	Tinkerplay Blokify or 3D Creationist TinkerCAD TinkerCAD/123D Design TinkerCAD	
4th	SCI 4.6 VS 4.2 SCI 4.3	CCSS.SCI.5.3.3* CCSS.SCI.5.3.2* CCSS.SCI.4.1.1	Weather & instruments Landforms Circuits	TinkerCAD or Blokify TinkerCAD/123D Design TinkerCAD	
5th	SCI 5.5 SCI 5.6 SCI 5.7	CCSS.SCI.7.2.2&3&4* CCSS.SCI.5.3.2 CCSS.SCI.5.3.2	Cells Ocean Floor Layers of the Earth	TinkerCAD TinkerCAD Revolved	

Common Core Standards are aligned with Colorado State Standards
*indicates that standard does not match suggested grade level