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ID/Type/OLE		Word/Definition/Link
279	TinkerCad	Align
		v. In TinkerCad, one needs to place two or more objects in precise relationship to one another. For example, the designer may want to align the centers of each object or align the outside edges. Action: Enclose objects in a Command Box so both objects are highlighted, Edit->Align->click on the axis to be aligned.
		https://www.youtube.com/watch?v=Ru742pUG_Bc
296	TinkerCad	Bevel
		n. A transitional edge between two surfaces. To create a bevel, form an object with the "transitional characteristics" desired and convert it into a "hole" form using the Inspector Window. Then, group the hole and the solid object. Bevels are also referred to a "chamfers."
		https://www.youtube.com/watch?v=J-6X6in6Las&t=540s
305	TinkerCad	Caliper
		n. A device used to measure the distance between two sides. Most 3D designers utilize electronic calipers capable of displaying measurements in the metric (i.e. centimeters and millimeters) and Imperial (i.e. inches) systems.
		https://en.wikipedia.org/wiki/Calipers - Digital_caliper
294	TinkerCad	Chamfer
		n. A transitional edge between two intersecting planar surfaces. To create a chamfer, form an object with the "transitional characteristics" desired and convert it into a "hole" form using the Inspector Window. Then, group the hole and the solid object. Chamfers are also referred to a "bevels."
		https://www.youtube.com/watch?v=J-6X6in6Las&t=540s
272	TinkerCad	Command Box
		n. A graphical box drawn around an object or group of objects used to designate the objects for some kind of operation. Action: Left-click and drag a box around objects to be highlighted. Verify the objects are highlighted with blue.

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ID/Type/OLE		Word/Definition/Link
287	TinkerCad	Copy/Paste
		v. Creating one or more copies of an object. Similarly, one can copy objects from one modelling file to another. One can copy and paste at angles by copying an object, pasting it, rotating the pasted object and copying it repeatedly. The result is copying-pasting at progressive angles. For example, one can add teeth to a gear body in this fashion. Action: Left-click an object->Ctl-C->Ctl V. Alternatively, Left-click an object->Edit->Copy->Edit->Paste. Alternatively, Alt + C->Alt -Shift + V to paste in place. Alternatively, Edit->Duplicate->Pull source and copy parts apart.
		https://www.youtube.com/watch?v=rwyTzY55vSU
275	TinkerCad	Dimension
		v. To change the dimensions of an object or group of objects. Action: Left Click on Object verify it is selected (surrounded by blue). Left click and drag a grip in the appropriate direction. Alternatively, Alt + Left Click & Drag to scale relative to the center point. Alternatively, Shift + Left-Click & drag for 3-direction uniform scaling.
		https://www.youtube.com/watch?v=qGSenao6CEk
303	TinkerCad	Download
		v. Moving the design file from the Cloud to the user's local computer. Action: Main Menu->Design->Download for 3D Printing. Look for the file in the "Downloads" file on your local computer.
		IDWordDefinitionLinkOLE ObjectType
288	TinkerCad	Duplicate
		v. In TinkerCad, called "Smart Duplicate." Action: Left-click object->Edit->Duplicate->Press Arrow Key to Move Cursor->EditDuplicate.
		https://www.youtube.com/watch?v=rwyTzY55vSU
293	TinkerCad	Emboss
		v. Raising material from an object in the design. To emboss, group the object you want to emboss with the design object.
		https://www.youtube.com/watch?v=i7EyUKfJz3Y

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ID/Type/OLE		Word/Definition/Link
295	TinkerCad	Engrave
		v. Subtract material from an object in the design. To engrave, group the object you want to engrave with the design object in "hole" form. Any object can be converted from a solid object to a "hole" object in the Inspector Window.
		https://www.youtube.com/watch?v=i7EyUKfJz3Y
302	TinkerCad	File Name
		v. TinkerCad automatically names every file the users create because the design files are maintained in the Cloud. To change the name assigned by TinkerCad, select Design->Properties->Change and enter the file name you desire. The designer can specify whether the design should be "shared" or should remain "invisibile" to the User Community.
		https://www.youtube.com/watch?v=C1JaslCrWP8
297	TinkerCad	Fillet
		n. A transition between two intersecting planar surfaces where the corner between the two surfaces is filled in. Very similar to a chamfer of bevel, except that the outer surface is convex.
		https://www.youtube.com/watch?v=iw7Lgttc-iE
286	TinkerCad	Flip (also, "Mirror")
		v. To create an identical object in a mirror image of the original object. This operation is used to create left-hand and right-hand pairs. Action: Left-click object to highlight it->Select Adjust->Mirror.
		https://www.youtube.com/watch?v=rgnvNXCh-mw
264	TinkerCad	Grid Setup
		n. Tool in the lower right-hand corner of the design screen to establish the increments on the workplane grid
269	TinkerCad	Grips
		n. The "handles" on the outside of an object used to change its size. Left click on the object to view the grips. Action: Alt-Key + Rt Click & Drag to scale relative to the center point; Shift Key + Rt Click to scale uniformly.

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282	TinkerCad	Group
		v. Combines two or more separate objects into a single object. Action: Shift-Left-Click the objects to highlight them->Click Group on the tool Bar.
		https://www.youtube.com/watch?v=m0UQHLbGcF0
284	TinkerCad	Hole Object
		n. Subtracts from an object the 3-dimensional space occupied by a shape. This operation is used to cut or shell objects. Mathematically, it is a "Boolean Subtraction." Action: Left-click + Drag a shape from the Shape Generator->Select "Hole" from the Inspector Window->Move the Hole shape and Solid shape together as appropriate->Select Group.
		https://www.youtube.com/watch?v=IxrsHSELHsw
289	TinkerCad	Inspector Window
		n. A window arising from the selection of a Shape from the Shape Generator Panel which allows conversion (back & forth) from a solid object to a hole.
		https://www.youtube.com/watch?v=IxrsHSELHsw&t=5s
285	TinkerCad	Mirror (also "Flip")
		v. To create an identical object as a mirror image. This operation is used to create left-hand and right-hand pairs. Action: Left-click object to highlight it->Select Adjust->Mirror.
		https://www.youtube.com/watch?v=rgnvNXCh-mw
273	TinkerCad	Move
		v. To move an object along its plane, highlight it and press one of the arrow keys on the keyboard. To move the object in increments of 10, press the shift and arrow key. Action: press appropriate arrow key, or Shift + Arrow Key.
301	TinkerCad	Name File
		v. TinkerCad automatically names every file the users create because the design files are maintained in the "Internet Cloud." To change the name assigned by TinkerCad, select Design->Properties->Change and enter the file name you desire. The designer can specify whether the design should be "shared" or should remain "invisible" to the User Community.
		https://www.youtube.com/watch?v=C1JaslCrWP8

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ID/Type/OLE		Word/Definition/Link
278	TinkerCad	Object
		n. A mathematical representation of a 3-dimensional surface.
		https://en.wikipedia.org/wiki/3D_modeling
261	TinkerCad	Orbit
		v. Act of moving the orientation from which the designer is viewing a design object. Generally, the same as "Plane Orientation."
304	TinkerCad	Orthogonal View
		n. The direction from which one can view the workplane or design: Top, Side, Front, Back, Cross-section or mid-section.
		https://www.youtube.com/watch?v=wa37nrj0pH0
306	TinkerCad	Overhang
		n. In 3D design, that part of a design that has no material under it leaving open the possibility that the portion of the printed model may "droop" due to gravity. Overhangs more than 45 degrees generally need support material to be printed under it which is removed after the print is completed.
		https://www.youtube.com/watch?v=gfauSm8aXh0
263	TinkerCad	Pan
	8	v. The act of moving a design object round to see it from various viewpoints. Action: click and hold the object with the right mouse button depressed.
256	TinkerCad	Plane
		n. the flat, two-dimensional surface on which a design object is placed and manipulated.
		https://en.wikipedia.org/wiki/Plane (geometry)

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260	TinkerCad	Plane Orientation Tool
	·	n. A tool on the design screen which allows the designer to view an object or design plane from various directions.
267	TinkerCad	Primitive
		n. The basic object forms used in "mesh-based" design programs. For example, a sphere, a cube, a taurus and many more. Also referred to in TinkerCad as "Shape Generators." They can be found in a panel on the righthand side of the design screen and many more primitives can be found in the Community files.
		https://www.tinkercad.com/search/?q=Shape+Generators
276	TinkerCad	Rotate
		v. Rotate an object along a plane. Action: Left-click on an object + Left-click + drag a curved gripper. Drag close to the center point of object to snap to 22.5 degree increments. Drag away from the center point to rotate in single degree increments.
201		
281	TinkerCad	Ruler Tool
		n. The Ruler Tool is used to make measurements or change measurements of an object along a particular plane. Action: Left-click Ruler Tool->Left-click the object on a plane. Use the appropriate gripper to alter a dimension.
		https://www.youtube.com/watch?v=qUA9VSdG5Oc
274	TinkerCad	Scale
		v. to change the dimensions of an object or group of objects. Action: Left Click on Object verify it is selected (surrounded by blue). Left click and drag a grip in the appropriate direction. Alt + Left Click & Drag to scale relative to the center point. Shift + Left-Click & drag for 3-direction uniform scaling.

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ID/Type/OLE		Word/Definition/Link
268	TinkerCad	Shape Panel
		n. Same as "Primitive." The basic object forms used in "mesh-based" design programs. For example, a sphere, a cube, a taurus and many more. Also referred to in TinkerCad as "Shape Generators." They can be found in a panel on the right-hand side of the design screen and many more can be found in the Community files.
		https://www.youtube.com/watch?v=bbnsAyVhR5s
300	TinkerCad	Shell
		v. The process of "hollowing out" the inside of an object such that the distance between the outer wall and the inner wall is uniform. In general, one creates an object in that shape that needs to be hollowed out, aligns it to the center of the object, converts it to a "hole object," and groups the hole and solid object.
		https://www.youtube.com/watch?v=xxtONgRdxDY&t=92s
308	TinkerCad	Slicer
		n. A computer program which converts stereo lithography (stl) files to the layer-by-layer and pixel-by-pixel instructions to a 3D printer for laying down the material to print a design file.
		https://en.wikipedia.org/wiki/3DSlicer
266	TinkerCad	Snap Grid
		n. In 3D design, the smallest unit of measure the designer wants the dimensions of an object to "snap to." Tenths of a millimeter (.1 mm) is commonly used for small objects. The "snap grid" can be changed anytime during the design process.
310	TinkerCad	Split Object
		v. For various reasons, a designer may choose to split an object that has been designed. This could be necessary to print the design with a flat surface on the build plate to prevent warping, or because the object is too large to be printed in one session, or for other reasons. The YouTube link below describes how an object design can be split.
		https://www.youtube.com/watch?v=1SwSqROgLpY

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307	TinkerCad	Support
		n. Material that is printed below an "overhang" and is removed after the print is completed. Supports are usually added to the print file in the "Slicer" software.
		https://www.youtube.com/watch?v=gfauSm8aXh0
292	TinkerCad	SVG File
		n. Text as well as other pictures can be imported into TinkerCad as "svg" files. Basically, anything that can be "Photoshopped," can be incorporated into a model. Jpeg, png and svg files can be used.
		https://www.youtube.com/watch?v=TgFWj8INx6w
291	TinkerCad	Text Fonts
		n. Text as well as other pictures can be imported into TinkerCad as "svg" files. Basically, anything that can be "Photoshopped," can be incorporated into a model. Jpeg, png and svg files are also usable.
		https://www.youtube.com/watch?v=TgFWj8INx6w
290	TinkerCad	Text Generator
		n. Pre-formed letters and numbers available in the Shape Generator Panel. Letters and numbers can be "holes" or "solid objects." Therefore, text can be embossed or engraved in a design. Jpeg, png and svg files are also usable.
		https://www.youtube.com/watch?v=hfQt0NmeYvU
259	TinkerCad	TinkerCad LOGO
	s	n. Logo designating the Autodesk TinkerCad brand and located on the design screen.
258	TinkerCad	Tool Bar
		n. That portion at the top of the design screen and to the right of the TinkerCad logo which displays such design tools as "Design," "Edit," "Help," "Undo," and etc.

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ID/Type/OLE		Word/Definition/Link
283	TinkerCad	Ungroup
		v. Separates two or more objects that were previously grouped together. Action: Left-click to highlight an object->Select Ungroup from the Tool Bar.
		https://www.youtube.com/watch?v=m0UQHLbGcF0
265	TinkerCad	Unit of Measurement
		n. A standard of measurement for the same type and quantity, established by convention. In 3D design, we normally measure in metric units (i.e. millimeters or centimeters) or in English units (i.e. inches or feet). Industry usually uses the metric measurement system.
		https://en.wikipedia.org/wiki/Units_of_measurement
309	TinkerCad	Warp
		n. In the fused demolition modelling (FDM) process, hot material is laid onto a flat build plate, and subsequent layers of hot material are laid on top of the previous layers. The subsequent layers are hotter than the previous layers and, have a different rate of cooling. Because of the different rates of cooling, the first layers are pulled away from the build plate causing the bottom of the printed object to "warp" or bow upwards from the flat build plate. If this "warping process" is not controlled, the object can be distorted and in the worst case, be pulled away from the build plate before the printing process is completed.
255	TinkerCad	Workplane
		n. The flat plane in the design area on which an object resides. There can be multiple work plane in a design project.
280	TinkerCad	Workplane Tool
		n. Establishes a plane on which design work is carried out. Action: Left-click Workplane->Left-click the face of the object where the designer wants the plane.
		https://www.youtube.com/watch?v=VfmziKJ28pY

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ID/Type/OLE	Word/Definition/Link
257 TinkerCad	 Zoom (in/out or +/-) v. An action in the design process where an object can be made to grow larger or smaller at scale. Action: Spin the center mouse wheel or click on the "+" or "-" in the upper left hand corner of the Work Plane. https://en.wikipedia.org/wiki/Zooming user interface

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