Tinkercad Training (18 pts.)

Students will begin to learn how to use Tinkercad by completing a series of online tutorials with a partner. Students will show their partners that they completed a tutorial and the partner will initial their partner's grade sheet that they saw it was completed. In order to find the tutorials, go to Tinkercad.com / Log on / Learn / "Direct Starters." Here are the online tutorials that you will follow:
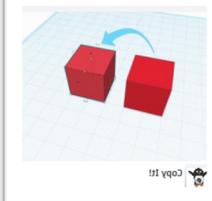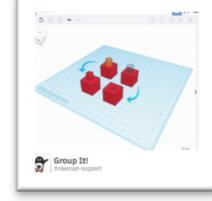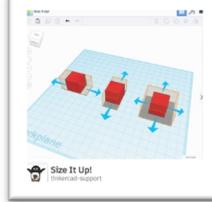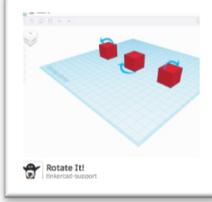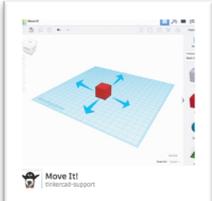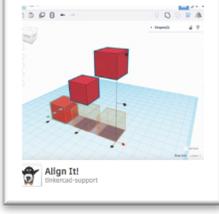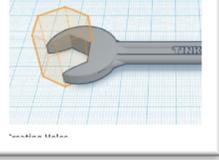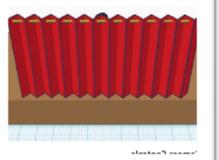
#1. Place It – You will learn to move shapes onto the Workplane.		
• Drag the Box shape onto the golden outline on the Workplane.	1pt.	
#2. View It – You will learn to check out your design by changing your view of the model using the View Cube.		
• Use the View Cube (white) to rotate the red square. Rotate the red square so that every side becomes visible.	1pt.	
• Use the scroll wheel on your mouse (or trackpad) to zoom in and zoom out.	1pt.	
• Rotate your view by holding the right mouse button (Control) and then move the mouse (With a touchpad, either ctrl+leftclick+drag, or rightclick+drag).	1pt.	
#3. Move It – You will learn how to move a shape around the Workplane.		
• Drag each of the red box shapes to one of the golden outlines (hints).	1pt.	
#4. Rotate It – You will learn how to rotate shapes on the work plane.		
• Rotate each red square 45 degrees so that it matches the angle of the golden outline (hint).	1pt.	
#5. Size It Up – You will learn to make a change to the basic box shape by sizing it up.		
• Use the black squares on the bottom edge of one of the red squares to size the shape in a single direction. Match its shape to one of the golden outlines (hint).	1pt.	
• Use the white squares on the bottom edge of one of the red squares to size the shape in two directions at once. Match its shape to one of the golden outlines.	1pt.	
• Your Choice: Use either the white or black squares on the bottom edge of the remaining red square to resize the shape to match its shape to one of the golden outlines.	1pt.	
#6. Group It – You will learn how to combine shapes to make new ones.		
Create a shape in which the red square has the orange cylinder sticking through it.	1pt.	
Create a shape in which the red square has a transparent hole visible through it.	1pt.	
#7. Copy It – You will learn how to copy shapes you have already made.		
Copy and paste the selected shape and place it next to the original.	1pt.	

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#8. Duplicate It – You will learn how to Duplicate shapes you have already made.

Create a duplicate of the original shape and make some changes to it.	1pt.
Then, make a duplicate of this shape and make some changes to it as well.	1pt.

#9. Hide It – You will learn how to hide the shapes from view until you need them again.

Hide 1 shape.	1pt.
Hide multiple shapes.	1pt.

#10. Align It – You will learn how to align multiple shapes.

• Align the red squares on the Workplane to the nearest red square. *Hint: This is done by selecting any shape on the Workplane...then hold the shift key and select a second shape that you would like to align the first shape with. Select the Align tab on the tool bar above! A number of black circles will appear around the shapes – hover over them with your cursor and they will show you orange outlines options that the shapes will align to when you finally select one.*	1pt.
• Use the edit undo button at least once.	1pt.

#11. Creating Holes – You will learn how to create holes in objects.

• Remove material from another shape using the hole feature.	1pt.
	1pt.

#12. Camera Controls – You will learn how to get varying views of the Workspace by moving the Cube.

• You will learn to view your designs by changing your view of the model using the View Cube.	1pt.
	1pt.