List of Classroom Activities

Objective of this list: To support classroom activities for the PD course:

Activity	Description
Draw a picture of an engineer	
Define what a scientist, mathematician, entrepreneur and artist do	
Discussion question to introduce the 6 hats. (Are charter schools good for public education)	To help introduce Ed DeBono method to create dialogue
Design a room in your house, etc	
Evaluate artifacts	Learn that engineering/design is everywhere • Compare/Contrast, Analyze, Evaluate • Show that engineering is all around • Develop concepts of design requirements
Do a story • Determining the design challenge • Ideation/Generative: Brain-writing exercise • Shaping / Sorting • Developing requirements • Convergent analysis • Sketch • Build • Present	
Finding a “BUG’ in your life	
Reflection questions	1. Design a system for students to set measurements for feedback. 2. How does mistakes and failure fit into this learning? 3. What have we learned from this?

Creating rubrics	Using learning objectives to have the students create their own rubrics.
Thinking skills: tools of engineering	• Incorporate thinking skills into literature & other content areas • Includes creative/critical thinking, questioning skills, strategies, meta-cognitive reflection • Trying to access higher-order thinking (i.e. from Bloom's taxonomy)
What do we as teachers have to do to prep the students for this process?	Create a list of pre-learning the students need and how are you going to use questions to get the process started.