

Order the 8 steps of the design process for this project. Write numbers from 1 to 8.

They build the backpack and try it out for a week. Emily uses it every day and writes notes about what works and what doesn't. 	Emily's backpack always breaks because she carries too many books. She wants to find a better way to carry her things to school. 	They prepare a poster with their drawings, results, and photos of the backpack. They present it to the class and explain what they learned. 	They draw a picture of the new backpack and plan where to put the pockets and which materials to use. 
Her group looks online and in books to see what materials are strong and light. They also ask friends what kind of backpacks they use. 	After talking as a group, they decide to build the backpack with extra pockets because it's easier to carry and cheaper to make. 	They come up with three different ideas: a rolling backpack, a strong backpack with more pockets, and a small cart. 	After the presentation, they decide to use a stronger zipper and add wheels to help on heavy days. They make a new version of the backpack. 