Cut out one strip of paper from the template below. To fold your Hexahexaflexagon, start by laying it (blank side down) before you. Now, make a "mountain" fold between the first 2 and the first 3. Now make another "mountain" fold between the next 1 and the next 2, continuing onward in a spiral fashion. When you've made 9 folds, you should have a straight strip with 10 triangles per side. Holding both ends (so it doesn't unwind), you should be able to see that at the front and the back there are two places with adjacent 3's. Make "valley" folds between these 3's so that they are now face to face. This should give you a hexagon with a tab sticking out. Fold this tab *over* so that it's covering the "x" triangle. One side of the hexagon should be all 1's, one side should be all 2's, and all the 3's should be hidden. Finally, use a small piece of double sided tape or glue to attach the back of the "tab" to the "x", and try to find out how to uncover the hidden side with the 3's without taking it apart. Are there any other hidden sides? How many? You might need a pencil to label what you uncover.

