

## **Geometry: Uno Proofs**

According to Dr. Karyn Purves, a recent study by scientists found it takes nearly 400 repetitions to create a synapse in the brain, unless play is involved. With play, the synapse can be created after 10 to 20 repetitions.

My students have always struggled with proofs. Well, they did until I figured out this little gem of a teaching strategy. If a lesson is fun and engaging as well as relatable to something they know, it is likely they will make the connection. Most students are familiar with the game Uno.

If not, there is no harm in teaching them how to play and letting them play a game or two in class. All students will then be able to use an engaging activity to connect to an unfamiliar concept. The Power Point presentation included in this lesson is a great way to introduce Uno Proofs to students and spark a class discussion.

A sheet of problems is also included for students to work on their own. Help those who have questions by asking what kinds of cards can be placed on the 'Given' card and if there are any cards that fit the criteria and allow another move. Repeat until the problem is 'Proven.'

Let individuals or groups create proofs of their own and exchange with other individuals or groups. If there are questions or differences of opinion, allow students to discuss the issues in the same manner that questions were answered by the instructor when students needed guidance or defend the steps taken if they disagreed. They may find there are multiple 'Proofs' that work.