

Collaborative Group Work Icebreaker

The purpose of this activity is to quickly engage participants in groups using a bit of arithmetic that can be a bit confusing, which encourages interaction. It also will tend to form groups of people who don't already know each other, since individuals seated/standing together will be split up. It also ensures that each participant is actively engaged (because no one knows in advance who will be asked to introduce group members).

Step 1: We are going to work in groups today so I need to know how many people are here. Let's count off: 1, 2, 3, 4, 5, ... , 31, ... Remember your number—we will use that next.

Step 2: To form random groups of 3 or 4, the leader takes the next higher multiple of 4 above the number of people in the group (27 in the group → 28 since $7 \times 4 = 28$). As each participant to divide their number by that multiple (7 in this example) taking note of both the remainder and the quotient.

Step 3: The group numbers are the remainders (so participant 27 is in group 6 along with number 6, 13, and 20). There will be some confusion and checking as people move to the new groups—check that each group has 3 or 4 members and have them check that each person in the group is in the right place—more discussion will take place) (you could mention that people are in groups mod the divisor using modular arithmetic)

Step 4: Participants introduce themselves to each other including some personal information in addition to name. They should take notes, since the leader will randomly choose one group member to introduce each person in the group to the whole audience. Use some method (such roll a die) to get a random number from 0-3 (in this example). The person in each group with that *quotient* will give the introductions. Again, there will be some discussion to identify the introducer for each group.

(A way to quickly form new groups later is to say that everyone must move to a group of 3 or 4 so that they are working with someone they have not already worked with in the new group. This mixes things up allowing a bit of individual choice.)

(An initial activity could also be assigned for each group to tackle as soon as they have made introductions)