#### Personal note from Sara VanDerWerf

- I use this task the first week of school.
- I like it because it is 'safe'. Students don't need to know one another to engage in the task.
- I follow up this task in the next couple of days with tasks with richer mathematics so students believe group work will be a norm in mathematics class.

## **100 Numbers Group Task Directions**

**Goal:** Students will name features of good group work in a safe beginning of the year activity.

- Students work in groups of 3-5
- Each student has a highlighter.
- Each group has one copy of slide 4.
- Give the groups 2 minutes to find the as many of the numbers from 1-100, consecutively, as possible
- At 2 min call time and have students put highlighters down. Students have usually found between 15-40 numbers. Have groups discuss strategy of how they found the numbers.
- Repeat the task with a new sheet of paper and 2 more minutes.
- Have students discuss again and then discuss as a class. Show pattern on slide 7 (numbers are 1 per quadrant working clockwise around and around)
- Do 3rd time. Usually one group gets to 100 during their 3rd try.
- Teacher task: During students working time, take photos of each group without them noticing.
- After the 3rd try, show the photos to students in your class working with their groups and ask then to list what good group work looks like.
- Write a class list of features of quality group work.

#### **Number Trouble**

- I'm going to set the timer for two minutes.
- When I say 'go' you will try to circle/highlight all the numbers from 1-100 in order. (1,2,3...100)
- You are trying to get as many numbers circled/highlighted as you can

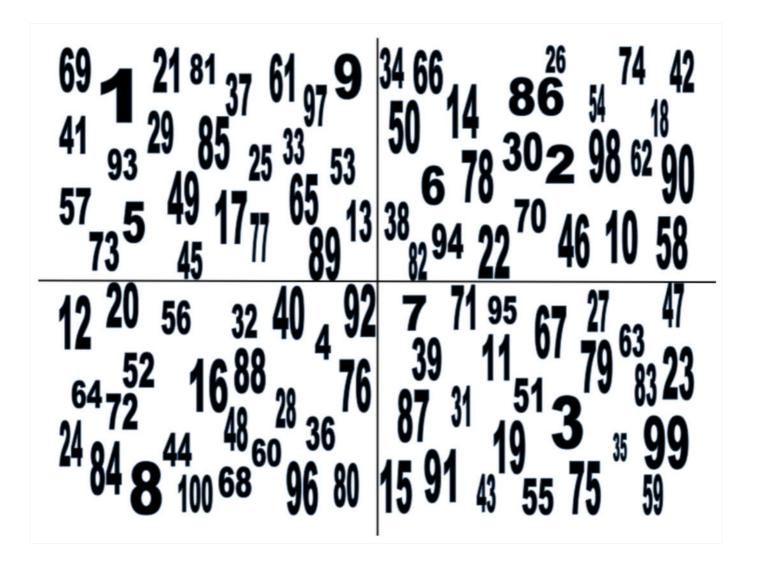
 $\begin{array}{c} 69 & \begin{array}{c} \begin{array}{c} 21 & 81 \\ 41 \\ 93 \end{array} \end{array} \begin{array}{c} 29 & 85 \\ 29 & 85 \\ 25 \end{array} \begin{array}{c} 33 \\ 53 \end{array} \begin{array}{c} 53 \\ 53 \end{array} \begin{array}{c} 53 \\ 678 \end{array} \begin{array}{c} 20 \\ 30 \end{array} \begin{array}{c} 20 \\ 45 \end{array} \begin{array}{c} 20 \\ 25 \end{array} \begin{array}{c} 2$ 

- Some of you might have noticed a pattern.
- Keep it a secret! You are now going to compete with your group against the rest of the class.
- Talk with your team and come up with a plan to get all the numbers circled or highlighted.

### **Shoulder Partner**

- Share what worked or did not work with your group completing this task.
- Was there a pattern you noticed?

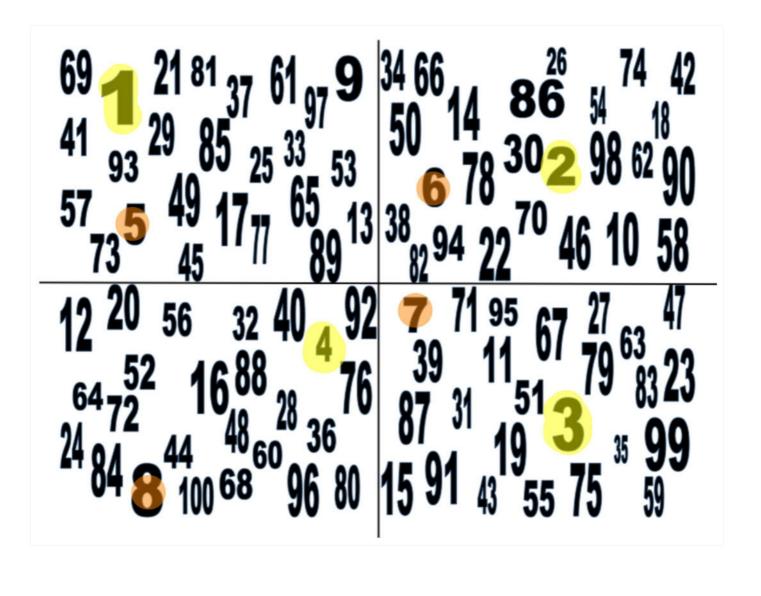
- How did working as a group help us accomplish more?
- How did knowing the pattern make your work easier?



## Note to teachers

# The Pattern:

Numbers are one per quadrant going clockwise from the upper left quadrant.



## **Teacher Directions:**

Show the pictures you took of your students working in groups. Ask students what they notice. Chart what your class names.

# Group work looks like...









Sounds like

#### **Teacher Directions:**

- Combine the lists of what quality group work looks like from all classes.
- Copy group photos and post in classroom.
- Post this list to refer to anytime you do group work during the year.
- During your next group work task, point to the photos and ask students to name again what we expect during group work time.

### Here are some of the pics from my classroom from this activity.



# Example of what my classes created of what quality group work looks like.



What does group work in mathmatics class look like?



- All group members are FOCUSED. Members are only talking to members of their group.
- · Group members are close (heads are together).
- Every group member participates. All group members are included.
- · Everyone uses an appropriate voice (2 foot voice).
- · Everyone is working on the assigned task.
- · The group makes a plan before beginning the task.
- · Group members support each other (help each other).
- Group members are all communicating (ask questions and sharing ideas).

