

## Numbers Race

*Purpose:* Play this game with students to communicate and demonstrate the role of practice, strategy and experience in learning something new.

*Materials:* 3 copies of the numbers race handout for each student; a pen or pencil

*Time:* 20 min

*Directions:* Make three copies of the numbers race handout for each student in class. Have access to a timer or second hand on a clock.

- Give each student ONE copy of the numbers sheet. Tell students that they should have the paper face down. When you tell them to flip it over, they should find number 1 and put their pencil on it. Their job is to connect the numbers from 1-40 with a continuous line. They will see how far they can get in 45 seconds. (connect 1 to 2, then 2 to 3, and 3 to 4, etc. and so on up to 40.)
- Have students flip over their papers and time them for 45 seconds. Say: Stop. Circle the last number you got to.
- Ask:
  - Was that easier or harder than you thought it would be? Why?
  - Did anyone notice a pattern as you went? What was it?
  - Did anyone use a strategy? What was it? Why did you use it?
- Point out that everyone approached this task with different prior experiences and strategies, so some of us did better than others. Also, some of us tried harder than others.
- Pass out a second sheet and tell the class they get a second chance. Give them 45 seconds again.
- Ask: Did anyone improve? How many of us did? By how much? Why do you think you improved?
- Pass out the third copy. Tell the class: I am going to give you one more chance and give you a strategy. Fold your paper in half vertically so there is a line down the middle. You must cross that line each time to find the next number.
- Give the class 45 seconds again to do this third try.

*Debrief/Processing:* Ask –

- What made the biggest difference for YOU in improving your performance?
- How is sharing strategies different from sharing answers?
- Could you improve even more? How?
- What does this make you realize about practice?

**Numbers Race:** You have 45 seconds to connect the numbers beginning with 1 and ending with 40

1      33      11      21      32      10      18      12

27      7      25      35      26      30      2      36

19      23      39      5      4      38      22      34

3      31      17      37      28      20      40      14

15      13      29      9      6      16      34      8