## What Sequences Make Me Happy?

A sequence of numbers has an order to it. For example, 1-2-3 is a different sequence from 3-2-1. Some sequences of 3 numbers make me happy. Your goal is to figure out the rule for what sequences make me happy. You can make up a 3 number sequences and l'll tell you if it makes me happy. Then you can make up another sequence, l'll tell you again, and we'll keep going until you're mostly confident you know the rule inside my head. Let's do the first sequence together. 2-4-6. It turns out the sequence makes me happy! Now that you have feedback from me, you should make your best guess for the rule that makes me happy (e.g., "counting up by 2's."). Make a rough estimate for how certain you are that the rule you guessed really is the rule for sequences that make me happy (i.e., $0 \%$ to $100 \%$ ). Now it's your turn. Write your own sequence of 3 numbers to test me. Wait until I give you a happy or sad face. Once I give you feedback, write your hypothesis. Say how sure you are. Make another sequence. Repeat until you're confident you know the rule for sequences that make me happy.

| Sequence | Fits My <br> Rule? | Guess What Rule Makes Me Happy | How <br> Sure? |
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| $2,4,6$ | $\ddots$ |  |  |
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