

Teacher's Guide for Flow Chart Codes

The Flow Chart Codes located under “Codes” on our Do The Math page can be used as the basis for a challenging yet fun math activity for small groups.

First, select one or more of the Flow Chart Codes for your students to complete in class or as homework. When deciding which codes you will use, keep in mind that, in most of them, the “start with” numbers going down the page form a number pattern (e.g. multiples of four, square numbers starting with one, or doubling then subtracting two). You may want your students to identify these patterns and come up with their own number patterns as part of this activity.

After your students have completed one or more of the codes, have a classroom discussion about how the students would go about creating their own Flow Chart Codes. Be sure to address the repeated functions often required by the octagonal “question” boxes. You may want to have the whole class work together to create a short Flow Chart Code as a guided practice activity.

When you feel that your students are ready, break your class into small groups and have each group create their own Flow Chart Code. Have the students refer to the “class” Flow Chart Code they created together as an example. Later, instruct each group to write about the strategies they used to create their code and explain these strategies to their classmates. Finally, the students can work on each other's codes and identify any number patterns embedded in the codes.

This exercise relates to NCTM's Number and Operation, Algebra, Problem Solving, and Communication standards for grades 3 through 5.