

# Lesson Plan for KNP Activity

## F 7703.1: Folding Strips!

**Teacher Planning Notes:**

**Task Group Number:** 7703

**Task Group Name:** Rods and Strips

**Strand:** Fractions

**Activity Level and Color:** 1 Red

**KNP Activity Link with access to Printables and Student Instructions:**

</knp/activity.php?id=7703.1&prefix=F>

**Numeracy Target:** Emerging partitioning (e.g. partitioning to create halves, thirds, etc.)

[Numeracy Targets Chart](#)

**Fluency Benchmark:** Fractions Fluency with fractions

**Kentucky Academic Standard(s):** [KY.1.G.3](#), [KY.2.G.3](#)

**Student-Friendly Learning Target:** I am learning to fold paper strips to make two or four equal shares. (I am learning to make eight equal shares.)

**Suggested Student Grouping(s):** individual/partners/small group

**Materials:**

Adding machine paper strips, Long strips (about 12-15 inches) and Short strips (about 8 inches), Activity Sheet, crayon or highlighter, pencil

**Activity Description:**

Students will fold strips of adding machine tape to make halves, fourths and (optionally) eighths. Each student will have his or her own paper strip of approximately 12-15 inches long. Students will fold the strip to make halves, then fold again to make fourths, naming the fractional parts with words (i.e. "half" and "fourth") and looking at the relationship between halves, fourths and one whole (i.e. determining how many fourths are in one-half and how many fourths are in one-whole). Students will compare one-fourth of a long strip (approx 15 inches) with one-fourth of a shorter strip (approx 8 inches) to see that a smaller whole results in a smaller fractional part. An activity sheet is provided to walk students through the tasks and questions.

If the activity is teacher led (this is recommended), the activity sheet does not need to be given to students. Rather, it can be used by the teacher as a guide for appropriate tasks and question. Or, a single sheet can be placed under a document camera and the class can answer the questions collaboratively. During this entry level activity, students are focused on using appropriate terminology to name the size of the sections (i.e. half, fourth, quarter or eighth).

At this level, it is recommended that you do not use symbolic representations such as " $\frac{1}{2}$ " to name each part. Research shows it's important for students to have strong verbal names for fractional parts before interacting with fraction symbols.

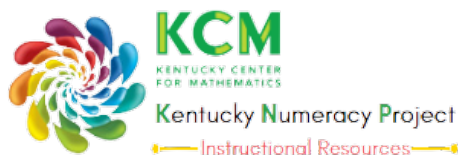
**Teacher Notes:**

Although beyond the scope of standards 1.G.3 and 2.G.3, an extension task of folding to find eighths is appropriate for most students. In particular, this is a supporting activity for 3.NF.2. Students need experiences with partitioning a linear setting before placing fractions on a number line.

**Evidence of Learning (Diagnostic Assessment of Progress):**

Give student a 12 to 15 inch strip of paper (preferably adding tape but construction paper will work also). Ask student to fold the paper to make fourths. Point to the second section and ask "what is the name of this part?" (or "What fraction of the whole strip is this part?" Be sure your pointing clearly indicates you are talking about the second section only.

Show a second strip of paper that is about 7-8 inches long. Ask, if I fold this into fourths, how will the size of these fourths [on the new strip] compare to the size of those fourths [on the first strip]?"

**KNP ID #F 7703.1**

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