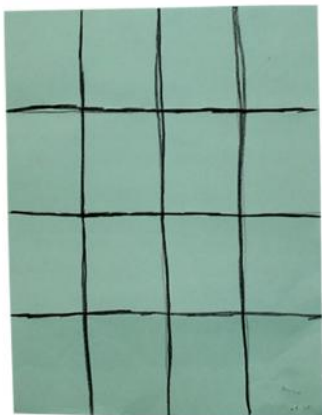


BROWNIE SHARING

UNIT B Equally partition area, linear, and set models

SAMPLE 1 Perserverance in finding 10ths

"At first we started out with 4 people. We folded the paper into 16 pieces so each would get 4 pieces. Then it changed to 8 people. It was easy because each would get 2 pieces. Then it changed to 10 people. We had a lot of trouble with this. We couldn't figure out what to do. Finally we folded it into really thin pieces of 10."



ATTEMPT 1

In the first attempt, this pair of students folded the paper in half, and then folded the half in half, and then the fourth in half, resulting in 16 portions. This did not help them arrive at 10 equal portions.

ATTEMPT 2

In the second attempt, the pair of students used a new piece of paper and accordion folds to make tenths. They abandoned this strategy part-way through.

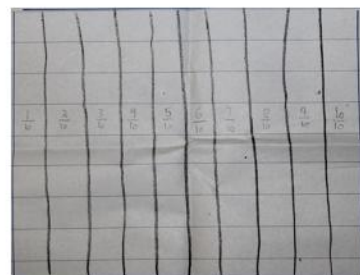


ATTEMPT 3

In the third attempt, they folded the longest length of the paper in half. They then made a soft fold in half again to estimate where a fold should NOT go. Then they marked in fifths on each side of the first fold, using the soft fold as a benchmark of one half of the half.

ATTEMPT 4

In the fourth attempt, these students transferred their paper folding to the chart paper, labelling the tenths in a cumulative counting strategy ($\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$ etc.).



The students also provided an explanation of their work.