

FRACTIONAL PARTS OF A GROUP

Materials: pink, yellow & green rainbow cubes

1. Show 12 rainbow cubes arranged in two groups of 6 on the overhead projector. Ask students to make $\frac{1}{2}$ their cubes yellow and tell you how they figured it out. Ask them to make $\frac{1}{3}$ of the cubes green and tell how they figured it out.
2. Rearrange the 12 cubes into 4 groups of 3. Ask students if $\frac{1}{2}$ and $\frac{1}{3}$ of this group of 12s will be the same or different than the first problem. Rearrange into 1 group of 12 and ask what if I have this group of 12? Try some on your own.
3. Have the students do the following independently and record their work.
 - a) 24 cubes $\frac{1}{3}$ are green, $\frac{1}{4}$ are pink
 - b) 16 cubes $\frac{1}{2}$ are green, $\frac{1}{4}$ are pink
 - c) 18 cubes $\frac{1}{3}$ are green, $\frac{1}{2}$ are pink

Discussion: Ask questions such as the following:

1. How did you solve the problems?
2. Did anyone do it differently? Explain.
3. Was one fraction easier to work with than another?
4. Did anyone learn any new strategies?

Close the lesson by asking students to create a similar problem and write how they would help someone try to solve it.

[Adapted from: 20 Thinking Questions for Rainbow Cubes Grades 3-6 #18, Creative Publications]

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