Picture Pie by Ed Emberley	
Parts of the Lesson	Materials Needed
I. Pre-activity: $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ of a circle -Demonstrate cutting circles into halves, then fourths, then eighths. Discuss how many halves make a whole, how many fourths make a half, how many eighths make a fourth, etc. -Play Fraction Circle game, rolling a handmade die and coloring in the resulting fraction. Die should have sides that say $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$.	I. Pre-activity: $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ of a circle -<u>3 large circles</u> – one to cut into halves, another into fourths, another into eighths - <u>Fraction dice</u> (one for each pair of children, or for a parent and child working together). Use 1 in cubes and label with a black Sharpie® pen. <u>-"Game board"</u> for each pair of players, consisting of 3-4 circles divided into eighths. (You can use the top of Funbook page 20.) A different color crayon for each player, to color in fraction rolled.
II. Read the book (Talking points) -This isn't really a story book. It is a book by a man who likes to show children how to do art. Read a few pages to establish that all pix are made using halves, fourths and eighths of circles. Wow, nifty!	II. Read the book. At least one copy of <u>the book</u> to show the nifty illustrations.
III. Do the math (Activities) -Have children make pictures from the book, using brightly colored pre-cut halves, fourths, and eighths of circles A nifty idea is to make the fish on dark blue paper (the very big fish could be a class project, too big for one child). Use a sequin for an eye. (Display fish papers on a bulletin board. It looks like an aquarium!)	III. For the activities -<u>Precut halves, fourths and eighths</u> of circles, photocopied on brightly colored paper. -For fish: sheets of <u>dark blue paper</u> for each child; <u>gluesticks</u>; <u>sequins</u> for fish eyes. [Leave book and extra circle parts at a center, for children to create other pictures in spare time.]
IV. Wrap Up (Debrief) -Tell how many halves, fourths, and eighths they used. (Older kids add fractions to get value of their fish.)	IV. Wrap Up -(optional) Use <u>goldfish crackers</u> to introduce the idea of fractional parts of a set, e.g. $\frac{1}{2}$ of 10; $\frac{1}{4}$ of 12.