June Teacher Directions: The Sundae Scoop

Teacher Preparation for this Lesson:
Before teaching this lesson, decide if you are going to have a real sundae party with real ice cream and toppings. This is a fun activity for end-of-school or for a hot day at summer day camp. You can choose any combinations you like, but this lesson is based on the flavors and toppings that work well for us when we do our own sundae parties. We use vanilla ice cream, chocolate ice cream and orange sherbet, topped with Hershey's chocolate sauce, strawberries, or no sauce at all. Then we give the kids the option of having whipped cream or no whipped cream. If you use other flavors and toppings you will have to adjust the lesson accordingly.

Read the Book: Stuart J. Murphy writes children's math books with intentionality. He has designated this book as a math book about combinations, for ages 6 and up. The story is about Winnie, the lunch lady, who is helping the kids organize a sundae booth for the school fair. They decide on flavors for ice cream and toppings, and she shows them how many combinations are possible by using a tree-diagram chart. The chart gets adjusted when unexpected events take place, like spilling the sprinkles, or having the ice cream melt too fast. This book functions well for mixed ages because you can adjust the math conversations to focus on counting, multiplying, fractions or probability.

Funbook Pages: *This month's free downloadable pages* include two pages from the Let's Read Math Funbook 2. On page 29, students think about how many different ice cream cones could be made, using 2 kinds of cones and 4 flavors of ice cream. If you have the Funbook, you can punch out the pictures of the cones and use glue sticks to place the pictures on the chart. Similarly, page 30 shows combinations for lunches when customers are given the choice of hot dogs or hamburgers, pretzels or chips, and lemonade or soda. If you do not have the punchouts, simply have children write or draw pictures in the little boxes.

Notice that the tree diagram in the book is top-down. Our ice-cream cone chart is bottom-up, and the lunch diagram goes from left to right. This is done intentionally, to help students develop flexibility in their thinking.

Lesson Extensions:
As mentioned above, the main idea for a lesson extension is to have your own sundae party. If you go with our selections for ice cream and toppings, you can engage the children in making a large sundae chart by placing pictures of sundaes onto a printed chart. *This month's downloadable worksheets* include three pages of a sundae chart and small colored pictures of the 18 possible sundae combinations. Tape the three pages together, in a row from left to right. Then have children cut out the sundae pictures and place them where they belong at the top of each chart. We have included a page illustrating what your finished chart will look like, with suggested discussion topics.

Some people like to make an even BIGGER class chart and use the larger pictures of the sundaes, which we have included in black and white. These larger sundae pictures should be colored as appropriate, using the flavors we selected, or different colors if you choose different flavors for ice cream and toppings. Obviously, your adapted chart will not match the chart that we have included among your free downladables.

Book-of-the Month packets ($19.99) include a copy of The Sundae Scoop book, copies of the downloadable worksheets available online, and an additional set of 18 large-size sundae cards, in color, for placing in a larger wall-size chart that is nice to make on mural paper. Book-of-the-Month packets can be ordered online, using a credit card. Alternatively, you can fax or email a purchase order to:

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