"Backpack-tivities" Extending the Classroom Learning Experience

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"Backpack-tivities" is a word we use to encompass tubs (learning centers) and backpack activities (takehome activities) that will enhance mathematical thinking for students. For either method to be effective, students must engage in discourse. For this reason preparing questions to ignite discussions is key to reaping the benefits of "backpack-tivities." Literature connections provide a context for mathematical problem solving and can make mathematics more accessible for all. Here are a few ideas to get you started.

- **Homework Help**: Ever wondered what would happen if the rain (not the dog) ruined your homework? Explore computation with your students by helping them to solve soggy homework problems in the classroom or at home with their parents.
- **Sort It Out**: Read the poem "Sylvia Cynthia Sylvia Stout!" by Shel Silverstein. Give each student a bag of "trash." Students will sort the trash into several groups based on various attributes determined by the group. Students can also play a game called "Guess my Rule". The object of the game is for the students to figure out how to explain to others how they are sorting their set. Students can also make a graph of their sort.
- **Measurement Is Huge:** Read <u>Jim and the Beanstalk</u> by Raymond Briggs and have students create a hat or pair glasses to fit a giant. A giant head may be drawn on poster-board or created from a balloon. Materials might include a string and ruler or tape measure along with tape and construction paper.
- **Beary Fun:** Read <u>Brown Bear, Brown Bear, What Do You See?</u> by Eric Carle and have students act out the pattern found in the story using masks. Students can then create their own repeating or growing patterns with bear counters.
- Bugs! Bugs! Read <u>The Icky Bug Counting Book</u> by Jerry Pallotta. Students can then create
 subitizing flashcards by programming their cards with dot stickers and flashing them to each
 other. They can also create a "bug" out of pattern blocks and then write a key by tracing each
 kind of block and writing the number that tells how many they used. They can then get a partner
 or parent to recreate it.
- Happy Birthday from Dr. Seuss: Create Dr. Seuss inspired math activities using his book, <u>Happy Birthday to You</u>. Some ideas include creating a birthday pet reservation by cutting out pictures of animals from magazines and then "as they do in Katroo," group them by 2s and skip count to find out how many pets you have to choose from. Another idea might include creating a time telling fish (i.e. a fish clock) and writing a time-telling problem for a neighbor to solve.
- Tangram Fun: Read <u>Grandfather Tang's Story</u> by Ann Tompert. Young students can build the different figures as they read the story. Extend the lesson by having students create their own animals/pictures. Have them count the number of shapes and see if someone else can recreate their drawing.