

Mathematical moments with 3 & 4 year olds
Measures: learning to compare liquid quantities

After enjoying the story [“Little Croc’s Purse”](#) by Lizzie Finlay several times, the children’s water play develops around ‘making lemonade’. Soon there is a Lemonade Shop, with other children entering the play to buy and ‘drink’ the lemonade, asking for their bottle to be re-filled. Often these over-flow and the children seem not very interested in questions about how full the bottles are when asked by an adult. The adult plays alongside the children and notices that children seem to be paying attention to the container that is being emptied, rather than the one being filled. She decides to make some changes to the provision. She sorts out a range of transparent containers that a child can lift in one hand and some jugs for easy pouring and places a table nearby on which the filled containers can be placed. She colours the water in order that the contents can be easily seen and importantly, sticks a band of masking tape around each container which is to be the ‘fill up to here’ line.



After demonstrating carefully pouring from the jug to the ‘fill up to here’ lines and asking children to call out when the ‘up to’ line is reached, she leaves children to play with this idea. Children independently practise careful lemonade pouring, taking it in turns to hold their chosen container whilst the other fills it with a jug of ‘lemonade’. The child holding the container watches it fill in order to call out “stop!” when the tape line is reached.

The bottles of lemonade are lined up on the table. Now more effective discussion takes place about whether the containers are filled 'fairly', not full enough, fuller than others, 'nearly full', or too full to carry (or 'drink').

Later, children decide which prices are charged for different amounts of lemonade.



Images with thanks to Maeve Birdsall and Esther O'Connor

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