

Careful Selection of Math Materials when Working with Number Lines

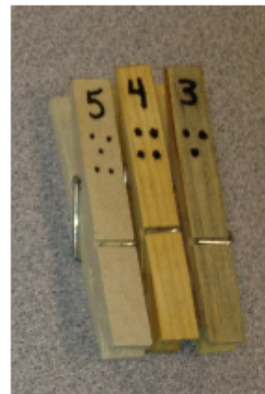
The materials we use with students are very important. In order to focus in on specific mathematics and make the experience as helpful as possible for students (developmentally appropriate), the selection and development of materials is crucial.

In our investigation of number lines we have learned the following:

1. **String** does not work well most of the time for number lines. It is too flexible and gets tangled, but also doesn't reflect the fixed nature of the linear model of a number line.



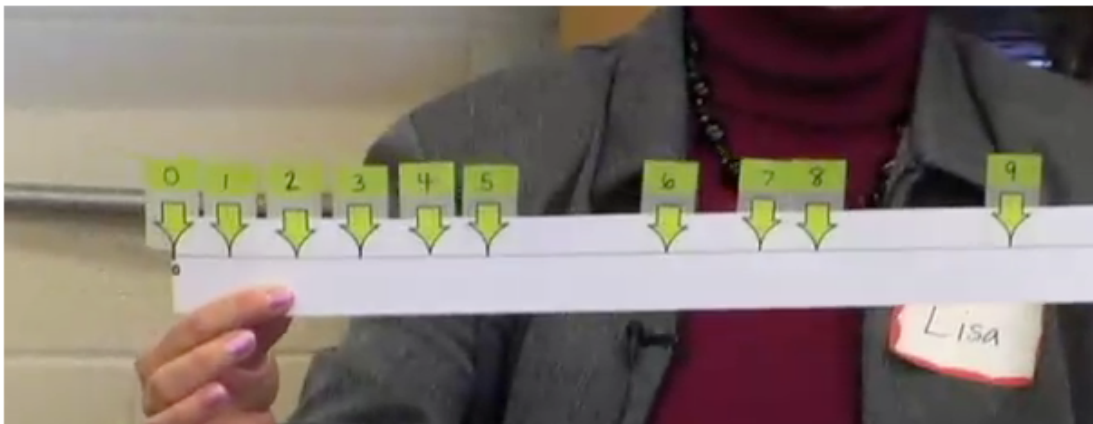
2. **Clothes pegs** with numbers on them can be useful however some students treat the peg as the width of the interval and have difficulty spreading the pegs out along a number line.



3. When children are very young (JK and some SK), they have difficulty thinking about spacing of the intervals. Using **Velcro** that is the same colour as the number line (glued to the number line), allows students to think about the numbers, their magnitude and even 'missing numbers' when the Velcro is in place.

[insert BBS Velcro from video]

4. When we are trying to draw students' attention to the exact point of the interval, we have found that **sticky arrows** work very well.



5. We used **sentence strips** as the base for number lines. These strips have lines on them and we cut these to length. This was a very simple way to make many number lines that students could manipulate in pairs and independently.



6. **Hopping on giant number lines** allows students to connect to number lines kinesthetically. We used the gym and tape on the floor to have students “hop along a number line” and to feel the space of the intervals. Students also used tiles on the floor in the classroom to think about intervals and hop along a row of tiles.

[insert gym picture]

We have also used frogs on popsicle sticks, counting bears and other counters to hop along large number lines.

