# **Teaching Strategies - Bundling Sticks**

# Establishing the Thousands place: (whole class activity)

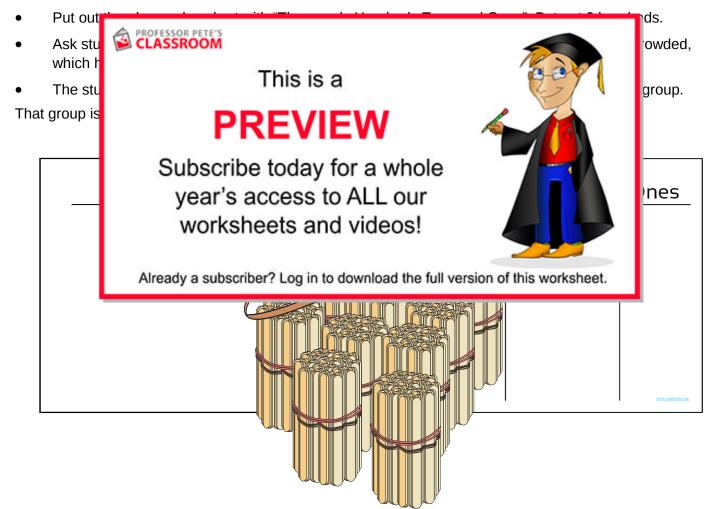
Students need to understand place value to the hundreds place very well before introducing the thousands place.

Put the place value chart (included in this file)\* with thousands,

hundreds, tens and ones columns on the desk. Print the charts and tape together to create a much larger chart which can go on the floor in front of the students.

Work with bundling sticks first (make sure you have several of bags of those 1000 sticks - they may be sold as coffee stirrers). You will also need some large elastic bands - large hairbands "scrunchies" are great for this.

• Have students bundle up hundreds, each comprising 10 tens.



Have students create more thousands bundles, and put them on the chart. This really does give them an impression of size. Compare 3 thousand with 3 tens or 3 ones. Students need to know that the 3 in the thousands is MUCH bigger than the 3 in the tens place.

\* A "Thousands, Hundreds, Tens & Ones" chart is attached to this file. Enlarge it and print it on larger paper or light cardboard before laminating it. Don't forget to tape them together.

Resources needed: Place value chart Several thousand sticks for bundling Rubber bands (hair ties, string or ribbon)

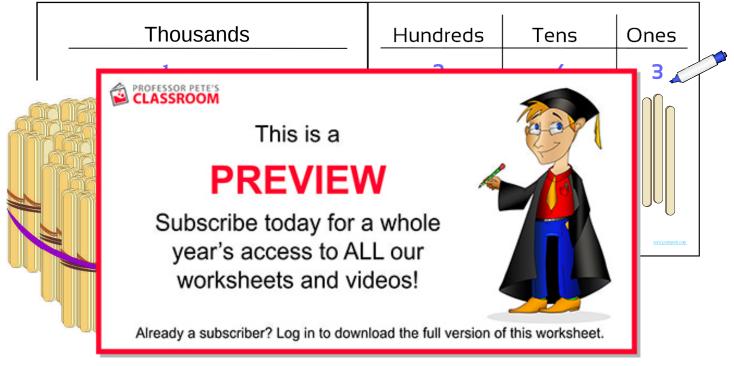
# Writing the number:

A number written in this thousands place tells how many bundles of a thousands there are. Write on the laminated thousands, hundreds, tens and ones place value chart with whiteboard markers.

Have students count and say the thousands first, then the hundreds then the tens, and the ones, writing symbols as they say each part of the name.

Discuss what happens when there are no ones, no tens, or no hundreds. Explain that we write a zero to "hold the place".

Repeat, creating and writing more numbers.



### Create more thousands:

Continue until you have run out of sticks. The more groups of a thousand the better it is to show size of the thousands. They dwarf all other places.

Extension Activity (whole class activity)

### Extend to the ten-thousands place:

Once you have 9 thousands, ask, "What will happen when we get 10 thousands?"

Students should say that they are bundled into another group. This is the ten-thousands place.

Use string or ribbon to tie up the ten thousand bundle.

This is really impressive for students and very empowering as they begin to picture the values represented by digits as the places extend beyond thousands.

#### Resources needed:

Place value chart (extend to include a tenthousand place 10 thousand sticks for bundling Rubber bands (hair ties, string or ribbon)





Thousands