

Place Value Foundations



Before using place value blocks or drawings, work with bundling loose items into groups of 10. Connect these bundles to place value mats. Discuss how our base-10 system is simply a system for keeping track of quantities. So that we don't lose track of things, we created this system to help keep things organized. Can you imagine if we had thousands of pompoms to keep track of? Bundling them into groups helps us keep track. And just as we can bundle these items, we can also un-bundle or exchange them.



Connect these bundled items to the base-10 blocks to show how the blocks represent quantities.* They are a tool for us. The math we are doing might be about pompoms, or stickers, or literally anything, but the blocks help us represent quantities of these items as we do math.



Work through the Concrete-Representational-Abstract (CRA) Model. Start small to warm up (e.g., do a couple of 2-digit numbers). Then expand to larger numbers as appropriate – beginning by building numbers with base-10 blocks, then representing them visually, then writing them using numbers as well as working in expanded form. Discuss how the three different representations are all connected.



* If you don't have base-10 blocks, but have access to iPads or devices, you can find great online blocks [here](#) or you can access printable place value blocks [here](#).