

# Digital Algebra

Are kindergartners really expected to do algebra? Believe it or not, they are! Before you start getting nervous, know this: kindergarten algebra is a lot different than what you did in high school. In the world of kindergarten, algebra means putting like things into groups, or noticing what doesn't belong in a set. Being able to identify, sort, and classify objects by their common attributes is an important kindergarten standard. Want to make it fun? Grab your camera, put on your walking shoes, and get ready for some algebra on the fly.

## What You Need:

- A digital camera
- Printer



## What You Do:

1. **Give Your Child the Camera.** Tell him to choose five objects and take a picture of each one separately. Lots of objects make good subjects—toys, books, articles of clothing, or even siblings! You can give a few suggestions to get your child started, but once he gets the hang of it, try to interfere as little as possible.
2. **Take the Adventure Outside.** This is where it can get really interesting. Send your child to the backyard and let her take the lead as she takes photographs of plants, insects, and garden tools. Walk around the neighborhood taking pictures of family and friends along the way.
3. **Print and Talk.** After your child has taken about 15-20 pictures, it's time to print! When you have printed one copy of each picture, ask your child to talk to you about the items in each photo, and why she chose to take pictures of them. Ask open-ended questions such as, "*What do you notice about this picture?*", rather than directed questions like, "*What is this?*" This will give her the opportunity to express herself and begin noticing things that are the same or different in the pictures.
4. **The Algebra.** Now for the algebra! Find two pictures with a similar attribute and ask your child if she can tell you what they have in common. For example they might both be toys, or they might be the same color. Ask your child if she can find any more pictures that belong in the group.
5. Continue playing this game until all the objects have been sorted into one or more groups. If there's a picture that didn't fit into any group, ask what other objects *might* have fit with it. For example, what other things are the same type, the same color, the same size? Finally, talk about how the groups relate to each other, another important algebraic concept that kindergartners explore in the classroom.
6. Let your child tuck her pictures into a photo book or hang them on her wall. Mission accomplished! Not only did you boost your child's kindergarten math skills, you've helped lay the groundwork for good algebraic thinking. And who knows, you may have planted *another* seed, too. She just might become a photojournalist some day!