Unplugged Coding Activity - Patterning

Before you jump straight into binary code and start talking bits, bytes and binary-to-text encoding (is your head spinning yet?), start with the basics. Modifying encoding for preschool (in game form) means you will be patterning.

The American Standard Code for Information Interchange (or ASCII) is computer speak for using patterns of zeros and ones to represent a range of different information.

But first, your child will need to have a solid grasp of understanding and copying patterns. Begin by creating simple patterns in the binary style (by using just two different patterning elements). Create ABA patterns, for example, by using two different sticker types; try creating "happy face, star, happy face."

When your child is ready, move onto ABBA patterns like "happy face, star, star, happy face" and increase in complexity from there.

Once your child has demonstrated the ability to copy and continue a pattern, try providing her with an <u>ASCII Converter</u> (don't panic, it's just a chart), and having her use this binary coding format to encode parts of the alphabet.

Use the same principles described above (of using two sticker types) and pattern on.