

Objective

By the end of this lesson, the student will have a basic understanding of the concept of "hashing" through fun activities that introduce them to the idea of making a unique code from a simple number.

Materials and Prep

- Paper
- Crayons or colored markers
- Small objects (like buttons or coins) for counting
- Access to a computer or tablet (optional for later activities)

Before starting the lesson, explain to the student that we will be playing with numbers and colors to create our own special codes!

Activities

- **Colorful Code Creation:**

Have the student choose a number between 1 and 10. Then, using crayons or markers, they will create a colorful drawing that represents that number. Each color can represent a different part of the number.

- **Counting with Objects:**

Use small objects like buttons or coins to count out the chosen number. Talk about how each object is special and can be part of a 'code' just like the number.

- **Hashing Storytime:**

Tell a story about a magical box that changes numbers into special codes. Use the chosen number and explain how it can be transformed into something unique, like a secret code!

- **Code Dance:**

Create a fun dance or movement that represents the number. For example, jump the number of times of the chosen number. This helps them remember their special code!

Talking Points

- "Did you know that every number can be turned into a secret code? Just like magic!"
- "When we make our colorful drawing, we are making our own special code. Each color is like a piece of the code!"
- "Every time we count our objects, we are creating a unique way to remember our number, just like how computers have their own codes!"
- "Let's jump and dance! Each jump is like a part of our secret code. The more we jump, the more special our code becomes!"