Variables -- Go Code: Go Fish, programming style!

Video demonstrating how to play -
https://www.dropbox.com/s/lbuha1ll8szjfi8/GoCodeDemo.mp4?dl=0

Play this game with up to 4 people and 1 person to record

Materials:
Deck of GO CODE variable cards
Boxes of 4 different shapes
Sticky notes
Pens

Concepts:

1. There are four types of variables: boolean, number, text, integer.
2. Variables can be given a name and assigned a value.
3. Students should have definitions of each of the variable types that they create during this activity.

Each player gets 4 playing cards and 6 boxes. The shape of the box represents the type of variable that the player is trying to create. If you can't get boxes, you may replace each with a different sized envelope or another container. Boxes were chosen for this example because they are large and distinct, and, in the case of integer and number, they represent the ability to cast an integer as a number but not the reverse.

1. Text - rectangular box
2. Integer - a small cube
3. Number - a large cube
4. Boolean - odd shapes or plastic cup

The object of the game is to make as many variable matches as possible. Each player takes a turn, trying to match cards in her hand with one of the containers in front of her. If the player has a match, she must say so and then read the entire variable correctly in order to claim the point. For example, a player has the card with the words "My Friend" on it and she has a rectangular box. After indicating that she has a match, she would hold up the box and say: text friend = "My Friend"

The player must make up a variable name that is not the same as the number or phrase it is assigned to and indicate the quotation marks by saying "quote" and "unquote" at the appropriate points. Variable names are written on sticky notes that are attached to the box it is assigned to. If the player makes a mistake, the first player to yell "Steal" gets a chance to correct the statement and claim the point. Students should place the boxes on the floor; they will be needed later. Disputes are settled by the teacher or undergraduate mentor who should be on call during this game as the ultimate arbiter. If a match is made, the player may draw a new card from the deck. If no one correctly identifies the variable, the card is returned to the deck and a new card is drawn. End of Turn

If a player cannot create a variable during her turn, she can ask any player for a variable type that she needs. For example, "Tyler, do you have a boolean?" A "no" answer must be confirmed by the teacher or undergraduate mentor.

Game play continues until there are no more boxes. Students should save their list of created variables for Activity D in Module 1 Section 2. The player that creates the most variables gets bragging rights and the title of "Coder Extraordinaire" for the rest of section 2.