

Name: _____ Date: _____

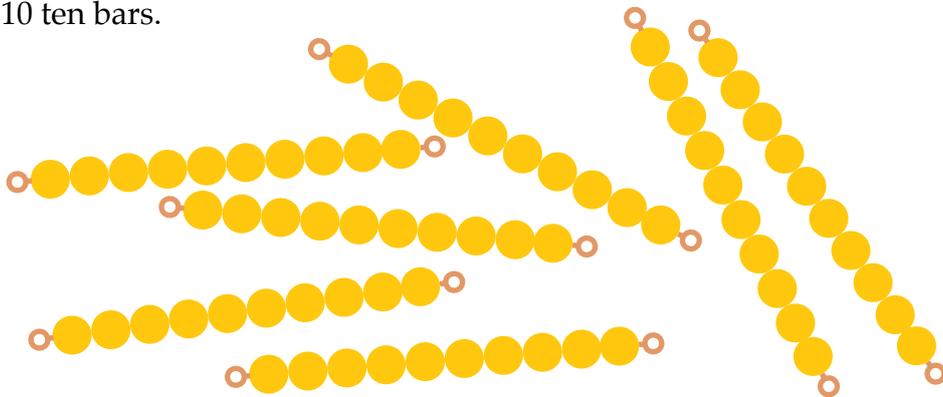
How to Build Your Own Snake Game

Materials Needed:

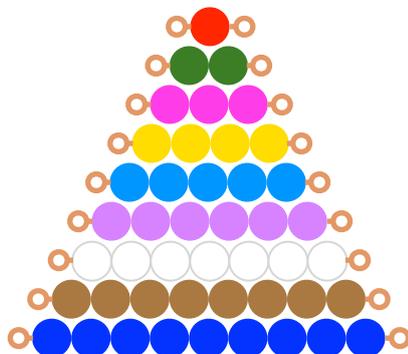
- bag of coloured beads, enough for 5 of each bead bar (*supplied*)
- bag of black and white beads, enough for one each of the reminder bars (*supplied*)
- bag of golden (or yellow-gold) beads, enough for 10 ten bars (*supplied*)
- strips of wire (*supplied*)
- pair of pliers (which can also be used to cut the wires)
- 3 boxes or Tupperware containers which can be used to store the beads

Directions:

1. On a table, sort your beads into their colours. Take a piece of wire and twist the end with the nose of the pliers to make a loop big enough to stop the beads coming off.
2. Start with the ten bars. Thread ten yellow-gold beads onto the wire you just looped at one end. Keeping the beads pressed together, close the other end of the wire in a loop to keep the beads as tight as possible. There should be enough yellow-gold beads for at least 10 ten bars.

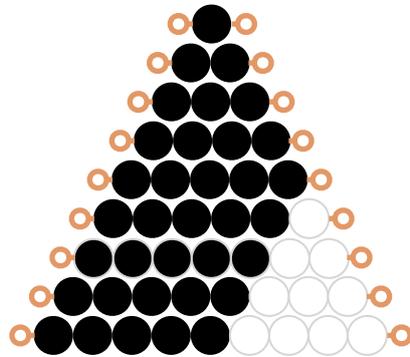


3. Choose any of the bead bars to do next. Follow the colours of the “bead stair” below:

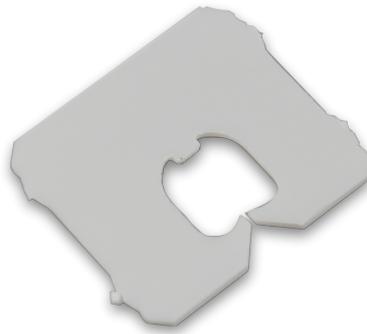


4. Finally, you’re ready to make the “reminder bars.” These bars are used to remind you “how many more than ten” two numbers add up to. Reminder bars are mostly black because black is the absence of colour. However if they were all black it would be hard

to know which bar you were taking without counting each bead. So the maximum number of black beads on a reminder bar is five. If there are more than five beads on a reminder bar the white beads tell you how many more than five, and your mind can add this number of white beads to five quickly to tell you the value of the bar without having to count each bead. Make each of the reminder bars in the stair below:



5. It's easier to count the beads if you have a counter. You can make a counter from a Kwik Lok bag tie that often comes with bread bags. You can also cut them from a plastic milk carton or other plastic container.



6. Finally you'll need to find containers for your Snake Game. You'll need separate boxes for the ten bars, the Reminder Bars and one for all the coloured bars together. These can be cardboard boxes or Tupperware containers, with or without lids. It's also good to have a larger container that can hold these three boxes.
7. When you do problems with your Snake Game you should use a Snake Game booklet. You'll be turning coloured bars into gold bars, just like King Midas in the legend of *King Midas and the Golden Touch*. You might like to read this story after making your Snake Game! What would it be like to have that power?