

Beads in a bag

Organisational setting: Children work in small groups or as a whole class

Materials required: Different coloured beads, cubes or counters, transparent bag or jar, blindfold (scarf, tie or eye mask; this could also be played using an opaque bag if you don't have blindfolds)

Give each pair a transparent bag or jar. Place five coloured beads, cubes or counters into the bag: three blue, one red and one yellow. Explain that you are going to ask a blindfolded child to pick a bead from the bag at random. Discuss the possible outcomes:

- *Is s/he certain to pick out a blue bead?*
- *Is it possible that s/he will pick out a red bead?*
- *Is it possible that s/he might pick out a green bead? Why? Why not?*
- *Which two colours have an even chance of being picked out?*
- *Which colour is most likely to be picked out? Why?*

Now blindfold a child and ask him/her to pick out a bead at random. Discuss the result – was it surprising or not? Repeat the experiment several times. Keep a tally of the results to see if a pattern emerges.

Extension 1: Play the game using different denominations of beads. For example:

- *Four green beads, two blue beads, one red bead/six red beads, one yellow bead*
- *Three yellow beads, two red beads, one blue bead*

Extension 2: After adequate modelling, allow the children to conduct similar experiments in small groups. Ask the groups to compare their findings to see if there is a pattern.