



Mystery bag: Teacher notes

<http://topdrawer.aamt.edu.au/Statistics/Good-teaching/Data-collection/Samples-and-populations/Mystery-bag>

Directions

Prepare four bags with the appropriate number of different coloured chips. Mark the bags as A, B, C, D. Prepare index cards that list facts about each bag.

1. Distribute a set of bags and index cards to each student group.
2. Without looking in the bag, students should draw one tile from Bag A.
3. They should record the colour of the tile drawn and replace the tile before drawing the next tile. Students should draw and record a total of six tiles from Bag A.
4. Repeat this process with each of the bags. Record information separately for each bag.
5. Students must then decide which index card is the correct label for which bag. They should attach the appropriate index card to the bag using a paperclip. Students should be prepared to explain WHY they matched the label to that particular bag.

Bag A	Bag B	Bag C	Bag D
5 Red 1 Yellow 5 Blue 1 Green	1 Red 5 Yellow 1 Blue 5 Green	3 Red 3 Yellow 3 Blue 3 Green	2 Red 6 Yellow 2 Blue 2 Green

Card #1	Card # 2	Card # 3	Card #4
This bag has more yellow chips than any other colour.	This bag has more red and blue chips than yellow and green chips.	This bag has equal numbers of each colour.	This bag has more yellow and green chips than blue and red chips.

