

Comparing Colors in a Handful

Materials: Connecting Cubes (2 bags, different colors) / Paper and pencil

Purpose: Student practices determining *how many more* or *how many less* one group has than another.

PART I: Less / How Many Less

Using the two bags of cubes, put ten cubes of each color in one bag.

Ask student to reach in and take out as many cubes as he/she likes and place them on the table, sorting the cubes by color and leaving them in piles. For added fun, student may choose to pretend the cubes are other objects (candy, toys, hair ribbons, etc.)

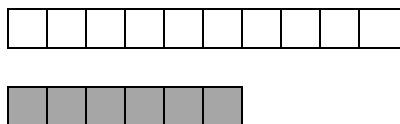
Ask student,

“Which color has less cubes? How many less?”

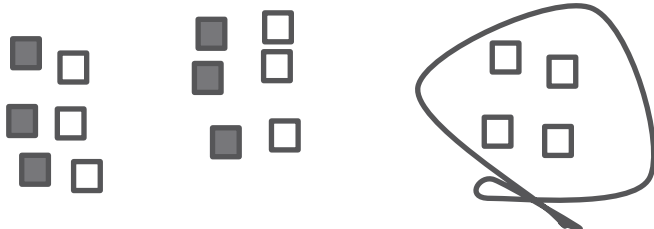
If the student has trouble answering the question, ask him/her if he/she can think about ways to organize the cubes to figure out the difference.

Some possibilities include:

- Make two trains by snapping together all the cubes of the same color, as shown below. Place the trains side by side to compare them. He/she may want to break off the “extras” to make the trains the same length before counting them.

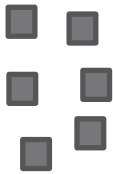


- Pair one of each color and see the leftovers.



I paired each gray with a white cube and I have 4 white left over.

- Recognize one number within the other.



I counted 6 grey.



I counted 6 white and I have 4 white left over.



Repeat for several different handfuls.

PART II: More / How Many More

Repeat the activity, using a different handful of cubes, but this time ask the student which pile has more cubes.

Ask student,

“Which color has more cubes? How many more cubes are that color?”

Repeat for several different handfuls.

(See options above for ways to organize cubes that can help student find the difference.)

PART III: Using Sentences with How Many More/Less?

When student feels comfortable figuring out *how many more* or *less*, demonstrate to him/her how to make complete sentences to compare the number of cubes, as shown below:

7 cubes are 5 more than 2 OR 7 cubes are more than 5 by 2.
4 cubes are 5 less than 9 OR 4 cubes are less than 9 by 5.

Ask student to try saying complete sentences on his/her own. Write on paper and say aloud to help student practice the sentence structure. Provide encouragement and help as needed.

NOTE: *If student struggles to verbalize a sentence, he/she may write the sentence, instead.*

PLEASE RETURN 20 SAME COLOR CONNECTING CUBES TO EACH BAG.