

Supplies

A sheet of poster board divided into two columns;
Pictures of people that are cut out of magazines.

The Activity

The student will determine a sorting category, for instance, pants-skirts, tall-short, adult-child, blue eyes-brown eyes. The poster board columns will then be marked with the sorting criterion. The student will then sort through the pictures and paste them on the poster board under the appropriate heading. Instructor and student then discuss the interpretation of the graph in terms of more, less, and the same.

Variations

- The student can look for pictures in magazines that would give other categories, such as animals, fish, or cars.
- The student can add a category, for instance men, women with skirts, women with pants, and then draw a bar graph of the results.

Focus:

Encourage the student to focus the student's attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Formulate a plan with the student.

Questions: What is the plan? What will we do first? Next? And then?

Act:

The student sorts the pictures and makes a graph.

Questions: What do you want to use as sorting category? What do you need to look for? Which column has more pictures? What does that tell you?








Reflect:

During and after the activity, reflect on what the student is doing/has done.

Questions: What did you do? Why do you think we use graphs? Where did you have the most? Does that mean that in general there are more?

Math Observation Checklist:

This activity will give insight into the student's understanding of sorting, categorizing, focused perception, systematic exploration, attending to more than one piece of information, attending to relevant information, and inhibition of impulsivity.

| Men | Women |
|---|---|
|  |  |
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|  |  |
|  | |

Supplies

Several sheets of graph paper with 1" squares:
Markers or coloring pencils; small objects such as buttons or beans or counters that will fit into the squares of the graph paper.

The Activity

The student will build a number pattern by laying out the counters in columns on the graph paper. They will then copy the pattern as a bar graph¹ on another sheet of graph paper. Instructor and student then discuss the bar graphs in terms of more, less, and the same.

Variations

- Instead of laying out the counters on the graph paper, the student can grab a handful and count them. Then they will record this number on the graph paper as a bar graph. Repeat with the next handful.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding and talking about them. Then explain what you will do. Formulate a plan with the student to achieve the goal.

Questions: What is the plan? What will we do first? Next?

Act:

The student lays out the counters and makes bar graphs.

Questions: What pattern are you making with the counters? What other patterns can you make? With this graph paper, what is the highest number of counters you can have in your column? How did you know that?

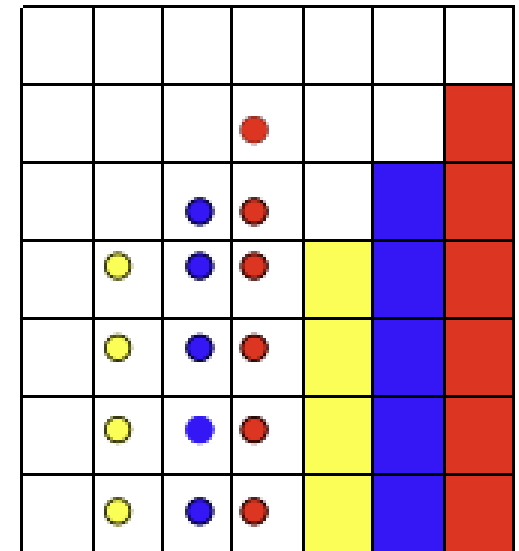
Reflect:

During and after the activity, reflect on what the student is doing/has done.

Questions: What did you do? Why do you think we use graphs? Where did you have the most?

Math Observation Checklist:

This activity will give insight into the student's understanding of sorting, categorizing, focused perception, systematic exploration, attending to more than one piece of information, attending to relevant information, and inhibition of impulsivity.



Footnote

¹ A bar graph is a graphic means of comparing the amount of something by using rectangles with lengths proportional to the amount of the groups or categories being compared. The do2learn.com website has graph paper you may download for this exercise.

Supplies

Several sheets of graph paper with 1" squares; A large graph mat drawn on a sheet of poster board; Markers or coloring pencils; A collection of objects such as plastic toy animals, leaves, or small plastic figurines.

The Activity

The student will sort out the objects according to some chosen category. Then he/she will count the objects in each category and create a bar graph¹ on a sheet of graph paper. Instructor and student then discuss the bar graphs in terms of more, less, and the same.

Variations

- Change the sorting category and have the student sort the same objects according to the new category. Compare the two graphs.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the supplies by touching, holding, and talking about them. Then explain what you will do. Formulate a plan with the student to achieve the goal.

Questions: What is the plan? What will we do first? Next?

Act:

The student sorts and lays out the objects, and makes bar graphs.

Questions: How are you sorting these objects? Where do you have the most? The least? How do you know that without counting?

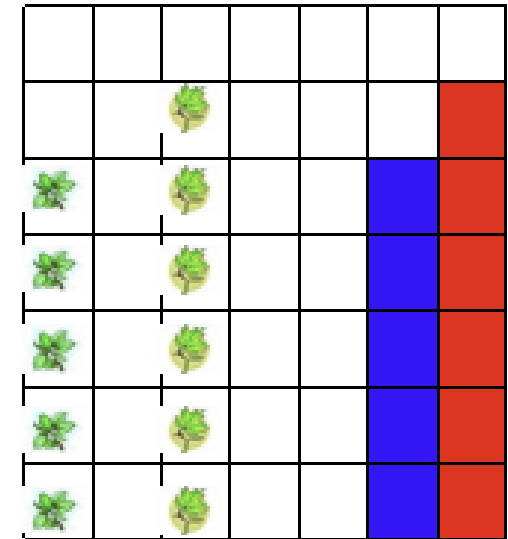
Reflect:

During and after the activity, reflect on what the student is doing/has done.

Questions: What did you do? Why do you think we use graphs? Where did you have the most? How could you tell?

Math Observation Checklist:

This activity will give insight into the student's understanding of sorting, categorizing, focused perception, systematic exploration, attending to more than one piece of information, attending to relevant information, and inhibition of impulsivity.



Footnote

¹ A bar graph is a graphic means of comparing the amount of something by using rectangles with lengths proportional to the amount of the groups or categories being compared. The do2learn.com website has graph paper you may download for this exercise.