

Sorting-Same/Different

Page: 102

Supplies

Workmat with two areas and small items such as beans, counters, shells, buttons, and bottle caps.

The Activity

The instructor and the student will work as a pair, matching the items on each side of the work mat. The items matched do not need to be identical but should match in quantity.

Variations

- Instead of a work mat, use bowls. The student and instructor take turns dropping a small item into a bowl while counting. After dropping a few items, ask the student how many are in each bowl. Then count to check if they were right.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the objects by touching and discussing what they are. Then explain the activity. Formulate a plan with the student.

Questions: What do we have here? Can you tell me what this is? What do we need to do first? Next?

Act:

When the student and instructor take turns lining up and matching the counters.

Questions: How many counters do you have? How many do I have? Does anyone have more? Less? How did you know that? How can you find out? How can you make your side have more than mine? What did you just do?

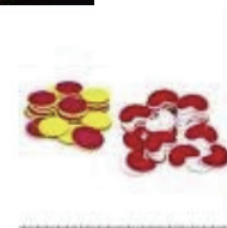
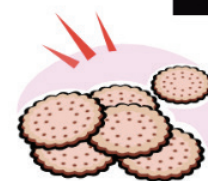
Reflect:

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

Questions: What did you do to make more? Less? What happened when you added counters? When you took some away?

Math Observation Checklist:

This activity will give insight into the student's skills in counting, quantity, cardinality, conservation, systematic exploration, taking more than two pieces of information into account, and attending to relevant information.



Supplies

Counters with different colors on each side, bottle caps, numeral cards or number dice, 1-inch graph paper or graph mats, and a cup or bowl.

The Activity

The student will roll the number die or select a number card and place that number of objects in a cup or bowl. They will then empty the bowl and place each counter in one of the columns on the graph mat based on its color or which side came up. Ask the student to identify which column has more, less, or the same.

Variations

- Instead of using a work mat, use 1-inch graph paper and have the student record the numbers by making bar graphs with colored markers.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the objects by touching and discussing what they are. Then explain the activity. Formulate a plan with the student.

Questions: what do we have here? Can you tell me what this is? What do we need to do first? Next?

Act:

The student mixes up the items in a cup or bowl and empties it. They count how many fell one way (e.g., upside down) and place those items in one column of the graph mat. The remaining items are placed in the other column, ensuring they line up. Repeat this process several times.

Questions: How many counters landed upside down? Upside up? Which side has more? Less? How did you know that? How can you find out?

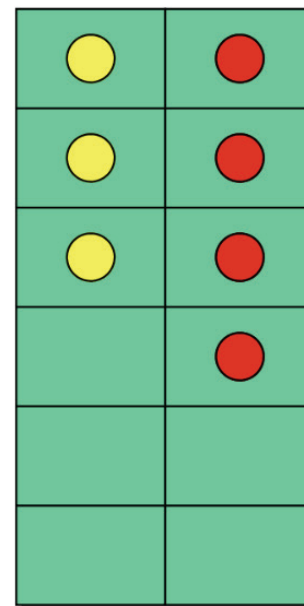
Reflect:

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

Questions: What did you do to make the graph? What happened when you emptied the cup again?

Math Observation Checklist:

This activity will give insight into the student's skills in counting, quantity, cardinality, conservation, sequencing and planning, systematic exploration, taking more than two pieces of information into account, and attending to relevant information.



Supplies

Counters, bottle caps, popsicle sticks, markers, construction paper, and work mats.

The Activity

The instructor and student will work together, each laying out a set, such as a set of bottle caps and a set of popsicle sticks on a large sheet of construction paper. The student will then match the sets by drawing lines between one object in one set and one in the other.

Variations

- Use small objects for counters and have the student draw two handfuls. Ask the student to estimate which handful has more and check the estimate by counting or lining up the objects with a one-to-one correspondence.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to get acquainted with the objects by touching and discussing what they are. Then explain the activity. Formulate a plan with the student.

Questions: What do we have here? Can you tell me what this is? What do we need to do first? Next?

Act:

The student and instructor create sets, and the student determines which set has more, less, or the same amount.

Questions: How many counters are in your set? How many in mine? Which set has more? Less? How do you know that? How can you find out?

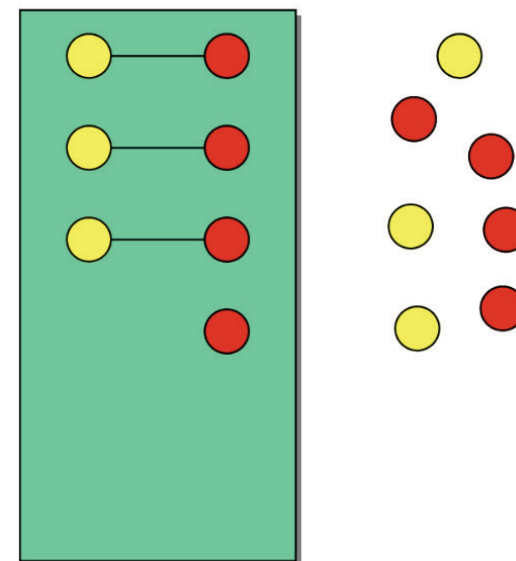
Reflect:

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

Questions: How did you know which set had more? How could you tell if there were the same number in each set? Different?

Math Observation Checklist:

This activity will give insight into the student's skills in counting, quantity, one-to-one correspondence, cardinality, conservation, sequencing and planning, systematic exploration, taking more than two pieces of information into account, and attending to relevant information.



Supplies

Pictures cut from old catalogs or magazines, construction paper, markers, scissors, and glue sticks.

The Activity

The student will find pictures that go together, such as cars and garages, and glue them onto construction paper. The student will connect each pair by drawing a line between the two pictures. They will choose several categories and create different pictures, then compare the pictures to determine which has more, less, and what is the same.

Variations

- Use small toys instead of pictures and line up the ones that go together. Discuss why they go together and how they are the same or different. Help the student understand that a set can be the same because of the number of items and different because of the kind, color, or shape of the items.

Focus:

Encourage the student to focus their attention on the task at hand. Allow the student to choose the pictures and explain the activity. Formulate a plan with the student.

Questions: What do we have here? Can you tell me what this is? What would go together with this to make a pair? What do we need to do first? Next?

Act:

The student glues the pictures, connects the pairs, and determines which has more, less, or the same.

Questions: How many pairs are in this picture? How many in that one? Which one has more? Less? How do you know that? Show me something that is the same. How can you find out?

Reflect:

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

Questions: How did you know which picture had more? How could you tell if there were the same number in each set? Different?

Math Observation Checklist:

This activity will give insight into the student's skills in counting, quantity, one-to-one correspondence, cardinality, conservation, sequencing and planning, systematic exploration, taking more than two pieces of information into account, and attending to relevant information.

