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Inside Problem Solving

Courtney's Collection

PreK

Materials: A set of coins (pennies, nickels, dimes—several of each kind) in a container for each pair of students, paper and pencil, crayons, or markers

Discussion on the rug: "What is a piggy bank?" Teacher asks the students questions about where there might be a collection of coins. If a bank is not familiar, then maybe introduce a jar of coins. Teacher holds a collection of coins in a container. **"Suppose I pick three coins from my bank/jar. Name the coins I might pick."** The teacher encourages the students to find answers for different selections of three coins.

In small groups: Each group has a set of coins in a container. Teacher asks the following questions. Go on to the next question when students have success.

- 1. "Name the three coins you picked out of your bank/jar. How much money do you have in all? Show how you know."
- 2. "Now name three more coins you can pick from your bank/jar. How much money do you have in all?"

At the end of the investigation, have students either draw a picture or dictate to you to represent their solutions.

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