## 2nd Grade - Act. 14: What's My Rule?

Summary
Students will use a variety of problem solving and math skills while playing the "What's My Rule" game.

Main Core Tie<br>Social Studies - 2nd Grade<br>Standard 2 Objective 1<br>Materials<br>- Clean Your Room, Harvey Moon<br>by Pat Cummings<br>1 spinner for each pair of children<br>overhead spinner<br>blackline of blank spinners<br>Additional Resources<br>Navigating Through Algebra (NCTM Publication)

## Background for Teachers

In the game "What's My Rule?" if the operation rules involve subtraction, a starting number should be selected, somewhat above the operation rule unless you are interested in exploring negative numbers.
Questioning should continue throughout activity encouraging students to consider all possible outcomes for a given situation. For instance, "What might the answer be if the starting number is 5 and there is only one spin? What about two spins?" Conversely, you could give the starting number and answers and have children determine the rule.

Intended Learning Outcomes
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5. Understand and use basic concepts and skills.

Process Skills
Symbolization, observation, problem solving
Instructional Procedures
Invitation to Learn
Read Clean Your Room, Harvey Moon. Ask: "What was one of Harvey's family rules?"
Instructional Procedures
Conduct a discussion about rules. What are some rules you have in your family? Your school? Your community? Why do you think we have rules? Inform the children that rules don't just apply to people. Sometimes numbers also have rules that must be followed.
Introduce the game "What's My Rule?" by asking a child to tell you a number greater than 4. Spin the overhead spinner, perform the indicated operation, and give the answer. Call on students to give other starting numbers, apply the same rule, and give answers. Repeat with different rules.
Begin the game by hiding the spinner from view as you spin and have the children try to figure out the rule by giving you different starting numbers. Apply the rule to each number and tell
students the answer. At the same time, make a T-chart with starting numbers on the left and answers on the right.
After children are comfortable with the procedure, put them in partners with one spinner. Have them take turns hiding the spinner and giving the starting number. The person giving the starting number can give up to three numbers.
Give a blackline of blank spinners to each partner. They can mark them, secretly, with their own rules and play again.

## Extensions

Possible Extensions/Adaptations
As a whole group activity, show the students a spinner with the rules you will use. Hide spinner and spin twice. Have students give three starting numbers between 6 and 10. Do both operations and give the answers. Children must figure out both rules. This encourages students to consider all possibilities in an organized manner and that there might be more than one combination that works. Family Connections
Parents talk about rules they had in their families and schools when they were growing up. Compare and contrast with rules today.

## Assessment Plan

As children are working in partners, circulate and ask questions about strategies used to figure out operational rules.

## Authors

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