



TEACHER PAGE

Lesson: Logic - Always and Sometimes

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New Arizona Math Strand 5 Structure and Logic

Grade 2

Articulated 5M22-01 Identify the concepts some, every and many within the context of logical reasoning. **5M22-02** Identify the concepts all and none within the context of logical reasoning.

Old Arizona Math Standard 6 Mathematical Structure/Logic

Grade 1-3

6M-F4 PO1 Use words such as all, every, none, some and many to make reasonable conclusions about situations.

Materials:

Chalk slates or white boards and board markers
Available use of *Kid Pix Studio Deluxe*
Word cards

Learning Objectives: Students will be able to:

- Interpret statements made with precise language of logic.
- Use words such as *all*, *every*, *none*, *some*, and *many* to make reasonable conclusions.

Overview:

Words such as *all*, *every*, *none*, *some* and *many* are explained and students practice using them to make reasonable conclusions about situations. This vocabulary covers two performance objectives in the articulated standards.

Engage Students:

Play "Simon Says." Use the precise language of logic. If the statement is true the students stand, sit if not true. Ask for reasons for their responses. Use sorting/categorizing manipulatives to enable students to understand this precise language of logic.

Content:

Prince Always introduces his words: all, every, none. Prince Sometimes has some and many. *All*, *every* and *none* are exact words that mean what they say. *Some* and *many* can have less precise use. Students will reach reasonable conclusions in regards to statements. Practical applications of this logic for students are found in SO WHAT, DIG DEEPER and TALK ABOUT IT!



Follow-up, extensions:

Use Kid Pix Studio Deluxe™ to develop more logical statements.
Play school using homemade flash cards with precise language vocabulary.

Assessment

Students successfully use "always" and "sometimes" words