

GOING TO SCHOOL

Performance Standard 8C.A

Use manipulatives to represent patterns and then record and explain their answer:

- *Mathematical knowledge*: Determine the extensions of patterns using manipulatives.
- *Strategic knowledge*: Represent patterns systematically and predict the following pattern.
- *Explanation*: Explain what was done and why it was done, if a drawing is used, it is completely explained.

Procedures

1. *In order to solve problems using systems of numbers and their properties (8C)*, students should experience sufficient learning opportunities to develop the following:
 - Solve real-life word problems using patterns.
2. This assessment may be given in a small or large group setting but must be completed individually. If the student has below level writing skills the explanation part may be completed by dictation to the teacher or by videotaping the session.
3. Assess using the standard rubric separately on each of the word problems. Assess Mathematical Knowledge by checking the accuracy of the answer. Assess Strategic Knowledge by checking the drawing and/or calculation on the recording sheet. Assess Explanation by the response to the “How” question either in written form or verbally.

Examples of Student Work follow

Time Requirements

- 15 - 20 minutes

Resources

- Paper, pencil for recording
- Copies of the “Going to School” student recording sheets
- Unifix cubes

NAME _____ DATE _____

GOING TO SCHOOL

Student Recording Sheet

I walk to school every day. I pass a red house, a blue house, and two white houses. Then I pass another red house, a blue house and two white houses. The houses are painted in this pattern all the way to school. What color will the seventeenth house be?

I know the 17th house will be _____ because

NAME _____ DATE _____

GOING TO SCHOOL

Student Recording Sheet

Our teacher gives us treats when we are having a good day. At 9:00 she gives us 1 cookie. At 10:00 she gives us 2 cookies. At 11:00 she gives us 3 cookies. If we are still being good, how many cookies will we get at 3:00?

At 3:00 we will get _____ cookies because

NAME _____ "Meets" _____ DATE 3-19-02

GOING TO SCHOOL

Student Recording Sheet

I walk to school every day. I pass a red house, a blue house, and two white houses. Then I pass another red house, a blue house and two white houses. The houses are painted in this pattern all the way to school. What color will the seventeenth house be?



I know the 17th house will be red because because it capt and repede.