## Math 5 - Act. 14: Patterns with Decimals

Summary
The objective of this lesson is to have students work together to display sequence card in the correct pattern.

Group Size
Small Groups
Materials
Overhead base ten blocks (cubes, longs, and flats)
Hundreds squares worksheet
Decimal sequencing cards (one set per group)
Paper and pencil
Additional Resources
Hands-On Math by Frances M. Thompson
Intended Learning Outcomes
2. Become mathematical problem solvers.

## Instructional Procedures

Invitation to Learn
Use the overhead base ten blocks and build a few patterns such as:
Have students draw and write down the numeric names under each one.
Instructional Procedures
Pass out the envelopes with the sequence cards to each group along with several blank hundreds square worksheets.
There are three sets of patterns with eight cards in each sequence. The objective is for the students to work together to determine which sequence belongs with each of the cards. Have them distribute the cards between the group members. The team must work together to decide which cards go in which sequence. The numbers will relate through an obvious pattern and though some numbers may seem to go with two sets, there should only be 8 cards in each sequence and every card must be used.
Once the students have finished and have laid their sequences out on their desks, they will use the hundredths square worksheet and color in the decimal representations in the order of the pattern. It should become clear if their patterns are correct by looking at the pictures. When teams have finished, have some share what they found. If someone has found a sequence that differs from the original one, discuss to make sure it is truly a consistent pattern.

## Extensions

## Possible Extensions/Adaptations

Students could create their own decimal pattern cards to share with other groups (similar to this activity).
Some students may benefit from using the base ten blocks or by coloring in the decimal amount before trying to find which sequence the card belongs to.
Homework \& Family Connections
Students could create their own decimal pattern cards at home and have a family member see if they can put the correct numbers of a pattern sequence in the correct group.

## Assessment Plan

Watch and listen as students discuss what pattern rules they find and how they sequence their cards. You could have them individually color in the squares matching their cards as an assessment of knowing how to represent different decimal amounts.

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