Horseshoe Math

Objective

Students will solve word problems related to horseshoes, classify a pile of shoes and perform other mathematical operations with shoes.

Materials

- students' shoes

Procedures

A horse needs new shoes every six to eight weeks. Trimming and shoeing is a regular and very important part of caring for a horse. The person who puts shoes on a horse is called a farrier. A standard horseshoe is made of steel and has a groove in which the farrier inserts nails to hold the shoe to the roof. (Don't worry! It doesn't hurt the horse at all. It's just like getting your fingernails trimmed.) Most horseshoes have spaces for eight nails.

1. Students will solve the following math problems:
   —If a farrier puts eight nails in each of the horse's four shoes, how many nails are used to shoe a horse?
   —The farrier is putting shoes on six horses that are used as a team to pull a wagon. How many nails will be used to put shoes on the team of horses?
   —If a horse gets new shoes every eight weeks, how many nails will be used in a year?
2. Take one shoe from each student and place them all in a pile.
   —Students will examine the pile of shoes and create classification categories.
   —Students will place the shoes in the appropriate categories and tally the number in each group.
3. Students will use the shoes to develop mathematical patterns (black, white, brown; lace, buckle, slip-on; etc.)
4. Student will each trace his/her own shoe and measure the outline, using standard and nonstandard measures.