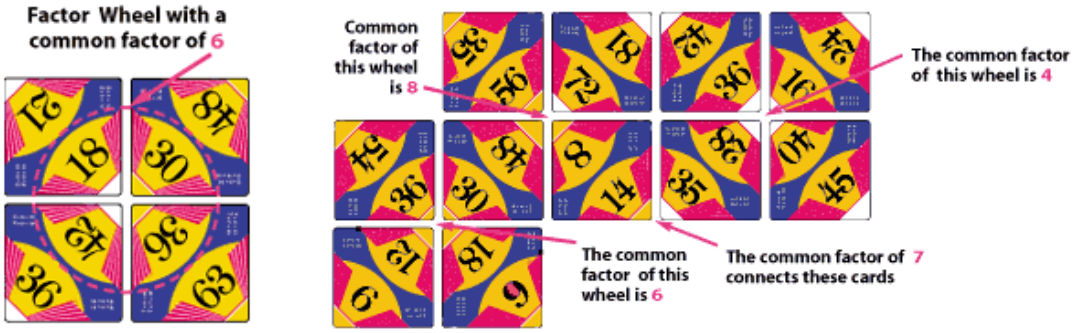
24® game

Teacher's Tools | Classroom Activities

Activity—Using Patterns

Editions used: Factors/Multiples

Have students use Factors/Multiples cards to create wheels that share a common factor. The numbers in the factor wheel below have a common factor of 6. Students can continue placing more cards around the edges to make more wheels. Remember, if the numbers are touching, they must have a common factor. Use any card with the same common factor, regardless of the color in the corner



Variations

1) Give each group of students six Factors/Multiples cards to make a single factor wheel at their desk. Call out a number2 through 12. Students then create one factor wheel with that number as the common factor. Some students might not be able to complete their wheel. Allow students to trade the card(s) they can not use with a neighbor. Remind students to look at both sides of the cards.

2) Divide students into groups of four. Distribute all of the Factors cards equally. Choose one student in each group to begin. Students take turns and place cards to form connected factor wheels.

Some "rules" that may be used:

a. Wheels may not contain two identical numbers.
b. Do not duplicate common factors.
c. Specify the number(s) that you want students to use as common factors, to correspond with your curriculum.
d. The student or group with the most completed wheels at the end of five minutes is the "winner."
e. Have students keep score. Each completed wheel has a point-value equal to the common factor of the wheel.

The student or group with the highest total score becomes class champion and that is the score to beat the next time the class does this activity. (The score on this example would be 6 + 8 + 4 = 18.) Students can write the common factor on pieces of paper and place them in the center of the wheels to help keep track of points.

3) Have students seated in a circle pass the deck around. Each student must play the card that is on top of the deck.

4) Challenge students to make nine wheels, the maximum number of wheels possible using 24 cards.

5) With a full deck, have students begin by making a wheel where the common factor is two. From one of the corners, the group must make a wheel with a common factor of three. Playing off of one of the corners of the three wheel, the students must make a wheel with the common factor of four, continuing to the last wheel with a common factor of nine.