

# Fractions in Disguise

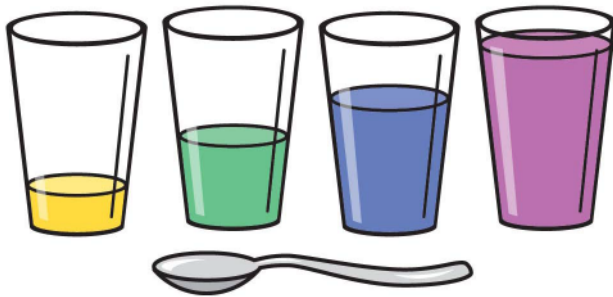
## RIF EXTENSION ACTIVITIES FOR EDUCATORS

STEAM-THEMES: SCIENCE, TECHNOLOGY, ENGINEERING, ART, MATH

### SCIENCE, ART, MATH MUSICAL FRACTIONS

Materials: 4 glasses, water, food coloring, metal spoon, paper, pencils

Fill 1 glass  $\frac{1}{4}$  full of water, 1 glass  $\frac{1}{2}$  full of water, 1 glass  $\frac{3}{4}$  full of water, and 1 glass completely full. Add a different drop of food coloring to each glass and stir. Let students experiment lightly tapping the sides of each glass with a metal spoon. What do they notice? Why does each glass have a different sound? Have students write their own piece of music using the fractions represented in each glass as the notes. Have a mini-concert when they are finished!



### TECHNOLOGY, MATH FLASHLIGHT FRACTIONS

Materials: paper square, paper circles, pencils, crayons, small flashlights

Have each student create a given fraction model on either a square or circle. Be sure that at least 2 students are creating equivalent fractions. When finished, place fractions around the room. Give 2 students each a flashlight. Call out a fraction. Who will be the first to find it?

### ENGINEERING FRACTION REDUCER

Have students bring in 1 piece of scrap material from home. Let students work in small groups to create their own fraction reducer using their scrap materials. What elements do they feel are

important to their invention? Each group should be prepared to share and explain its design.

### ART PART OF A WHOLE

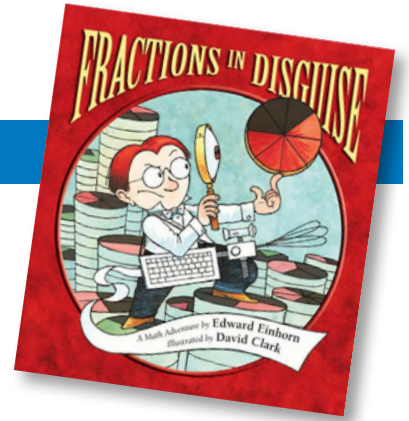
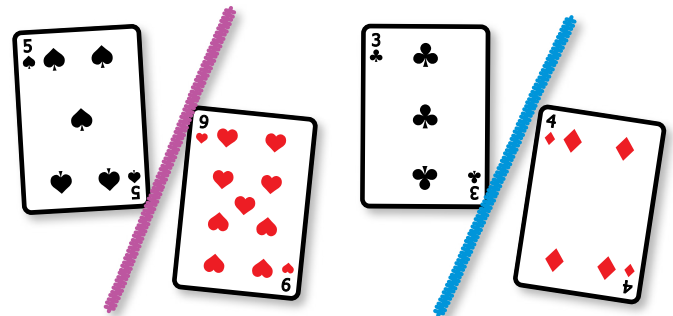
Materials: large paper plates, markers, scissors

Divide and cut each paper plate into 4 pieces. Let each student have  $\frac{1}{4}$  to decorate with a picture that describes themselves. When finished, have students reassemble their pieces to form whole paper plates. Use the plates to create a  $\frac{1}{4}$  mural about your class!

### MATH FRIENDLY FRACTION WAR

Materials: 2 decks of cards (face cards removed), 2 pipe cleaners

Have 2 players face off; each receives 1 pipe cleaner. Each player should draw 2 cards face down; place 1 above their pipe cleaner (numerator) and 1 card below their pipe cleaner (denominator). Flip the cards over, then calculate which player has the largest fraction. The player with the largest fraction keeps all the cards. Repeat until the deck runs out. The player with the most cards wins!



Reading Is  
Fundamental