


# SHAKE AND SPILL

Fractions of a Set ● Tenths ● Fifths ● Fourths

NAME: \_\_\_\_\_

**Shake 10, Spill, Represent** 

Shake them. Spill them. Represent them!

1

○	○	○	○	○
○	○	○	○	○

Color	Fraction

○	○	○	○	○
○	○	○	○	○

Color

○	○
○	○

Color

NAME: \_\_\_\_\_

**Shake 10, Spill, Represent**

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1

Tenths Frame


○	○	○	○	○
○	○	○	○	○

Fact Family

\_\_\_\_ + \_\_\_\_ = \_\_\_\_

\_\_\_\_ + \_\_\_\_ = \_\_\_\_

NAME: \_\_\_\_\_

**Shake 5, Spill, Represent** 

Shake them. Spill them. Represent them!

1

○	○	○	○	○
---	---	---	---	---

Color	Fraction (as fifths)	Convert to tenths

2

○	○	○	○	○
---	---	---	---	---

Color	Fraction (as fifths)	Convert to tenths

3

○	○	○	○	○
---	---	---	---	---

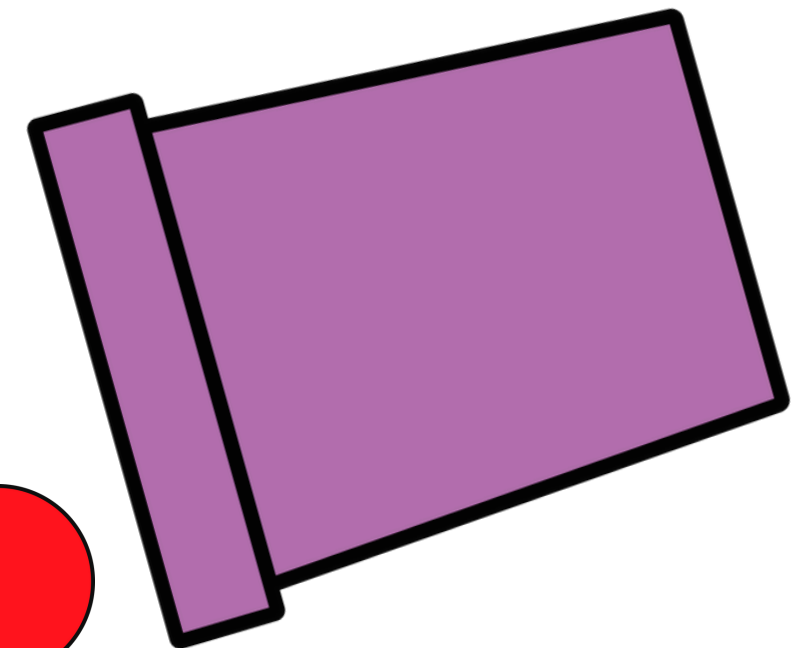
Color	Fraction (as fifths)	Convert to tenths

4

○	○	○	○	○
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Color	Fraction (as fifths)

Build  
Fraction  
Sense




SHELLEY GRAY

Looking for a hands-on, visual way to teach **fractions of a set**?

Shake and Spill Fractions is an engaging way to work with fractions of a set in a variety of different ways.

NAME:




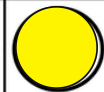
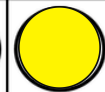
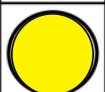
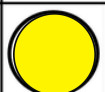
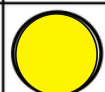
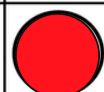
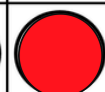
Shake 10, Spill, Represent



Shake them. Spill them. Represent them!

1

Tenths Frame

Part-Part-Whole

$\frac{8}{10}$	$\frac{2}{10}$
$\frac{10}{10}$	

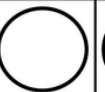
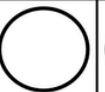

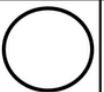
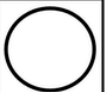
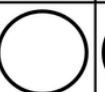

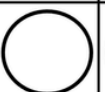
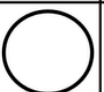
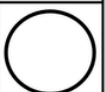
Fact Family

$\frac{8}{10} + \frac{2}{10} = \frac{10}{10}$   
 $\frac{2}{10} + \frac{8}{10} = \frac{10}{10}$

$\frac{10}{10} - \frac{8}{10} = \frac{2}{10}$   
 $\frac{10}{10} - \frac{2}{10} = \frac{8}{10}$

2

Tenths Frame

Part-Part-Whole


Fact Family

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$   
 $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

$\underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$   
 $\underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

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CONCRETE

REPRESENTATIONAL

ABSTRACT

Six variations of this activity are included for tenths, fifths, and fourths (18 different activities in all). This enables you to choose the activity based on your curricular goals.

NAME: \_\_\_\_\_

### Shake 5, Spill, Represent

Shake them. Spill them. Represent them!

**1** Fifths Frame

○	○	○	○	○
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Represent the fractions.

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Part-Part-Whole

$\frac{5}{5}$

Write an equivalent fraction for each color.

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NAME: \_\_\_\_\_

### Shake 5, Spill, Represent

Shake them. Spill them. Represent them!

**1** Fourths Frame

○	○	○	○
---	---	---	---

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**2** Fourths Frame

○	○	○	○
---	---	---	---

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**3** Fourths Frame

○	○	○	○
---	---	---	---

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**4** Fourths Frame

○	○	○	○
---	---	---	---

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

© Shelley Gray

NAME: \_\_\_\_\_

### Shake 5, Spill, Represent

Shake them. Spill them. Represent them!

**1** Fourths Frame

○	○	○	○
---	---	---	---

Fact Family

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Part-Part-Whole

$\frac{4}{4}$

**2** Fourths Frame

○	○	○	○
---	---	---	---

Fact Family

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Part-Part-Whole

$\frac{4}{4}$

© Shelley Gray

**A GREAT  
INDEPENDENT  
MATH  
STATION**



Whether it is **identifying**  
**fractions of a set**,  
**converting from tenths**  
**to hundredths**, or **adding**  
**and subtracting**  
**fractions**, there is a Shake  
and Spill game for you!

**Math is easier when you**  
**can SEE it!**

**MULTIPLE**  
**VERSIONS MAKE**  
**DIFFERENTIATION**  
**SIMPLE**

