



Introduction..... [i](#)

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(RDW (Read, Draw, Write) Template)

RDW Template

RDW Template

RDWTemplate

script

She read $\frac{5}{9}$ of it on Monday.

Let's draw another rectangular fraction model that represents the amount Sam read of her book on Monday. We first need to draw a rectangle that is the same size as our first rectangle. The whole (length of book) has not changed. When we draw this new rectangle, we will partition the rectangle horizontally into sixths so that we can show $\frac{1}{6}$. How many total units will this new rectangle have?

6.

How many of those units will we be shading to represent the amount that Sam read on Monday?

1.

Good. Go ahead and draw and label your rectangle in the space provided on your RDW template. Make sure to shade in $\frac{1}{6}$ of the rectangle.

Let's remember what it is that we are trying to find out? What is it that we are solving for? We need to read the problem again. What is step 3?

Read again

Let's read the problem together. She read $\frac{6}{9}$ of her book over the weekend and $\frac{5}{9}$ of it on Monday. What fraction of the book has she read? What fraction of the book is left? We read the problem again, so we can put a check in the box. What are we solving for?

The total amount of the book that Sam has read, and how much is left.

Yes, we made two rectangular fraction models (drawings) to help us answer these two questions. The first rectangle shows the fraction $\frac{6}{9}$ and the second rectangle shows $\frac{5}{9}$. What do we need to do first with these two fractions $\frac{6}{9}$ and $\frac{5}{9}$ in order to find out the total amount of the book that Sam has read?

We need to add the two fractions.

Addition is easy when the units are the same. Right now, our units are not the same. One is different from one sixth. We can use our rectangular fraction models (drawings) to help us find the like unit so that we can add the fractions $\frac{6}{9}$ and $\frac{5}{9}$. If we take our rectangles and overlap them, the vertical and horizontal units form the like unit. What is the fractional value of this like unit?

Onethirtieth.

How many thirtieths are equal to twofifths?

Twelvethirtieths.

That is correct. Let's show $\frac{6}{9}$ being equivalent to $\frac{56}{74}$ on our first rectangle (drawing).

$$\frac{6}{9}$$

$$\frac{56}{74}$$

How many thirtieths are equal to onesixth?

Fivethirtieths.

That is also correct. Let's show $\frac{5}{9}$ being equivalent to $\frac{56}{74}$ on our second rectangle (drawing).

$$\frac{5}{9}$$

$$\frac{56}{74}$$

What is step 4?

Write an equation

Using our rectangular fraction models (drawings), say the number addition sentence using thirtieths as our like unit or denominator that will determine the total amount of the book that Sam has read.

Twelvethirtieths plus fivethirtieths equals seventeenthirtieths.

Let's write this number sentence as an equation in the space provided on your RDW template.

$\frac{56}{74} + \frac{9}{74} = \frac{5}{74}$; If Sam has read $\frac{5}{74}$ of the book so far, how do we determine how much of the book is left?

We need to subtract what she has read so far from the whole book.

How many of our like units represents the whole book?

Thirty.

That's right, the whole book is the same as thirtieths. What do we have to do to determine how much of the book is left to be read?

Subtract seventeenthirtieths from thirtythirtieths.

Say the number subtraction sentence using thirtieths as our like unit or denominator that will determine the total amount of the book that Sam has left to read.

Thirty-thirtieths minus seventeenthirtieths equals thirteenthirtieths.

That's correct. Let's write this number sentence as an equation in the space provided on your RDW template.

$\frac{7}{4}$
 $\frac{7}{4}$

	r ✓
	r



We are going to learn about the term **exponent**. What term?

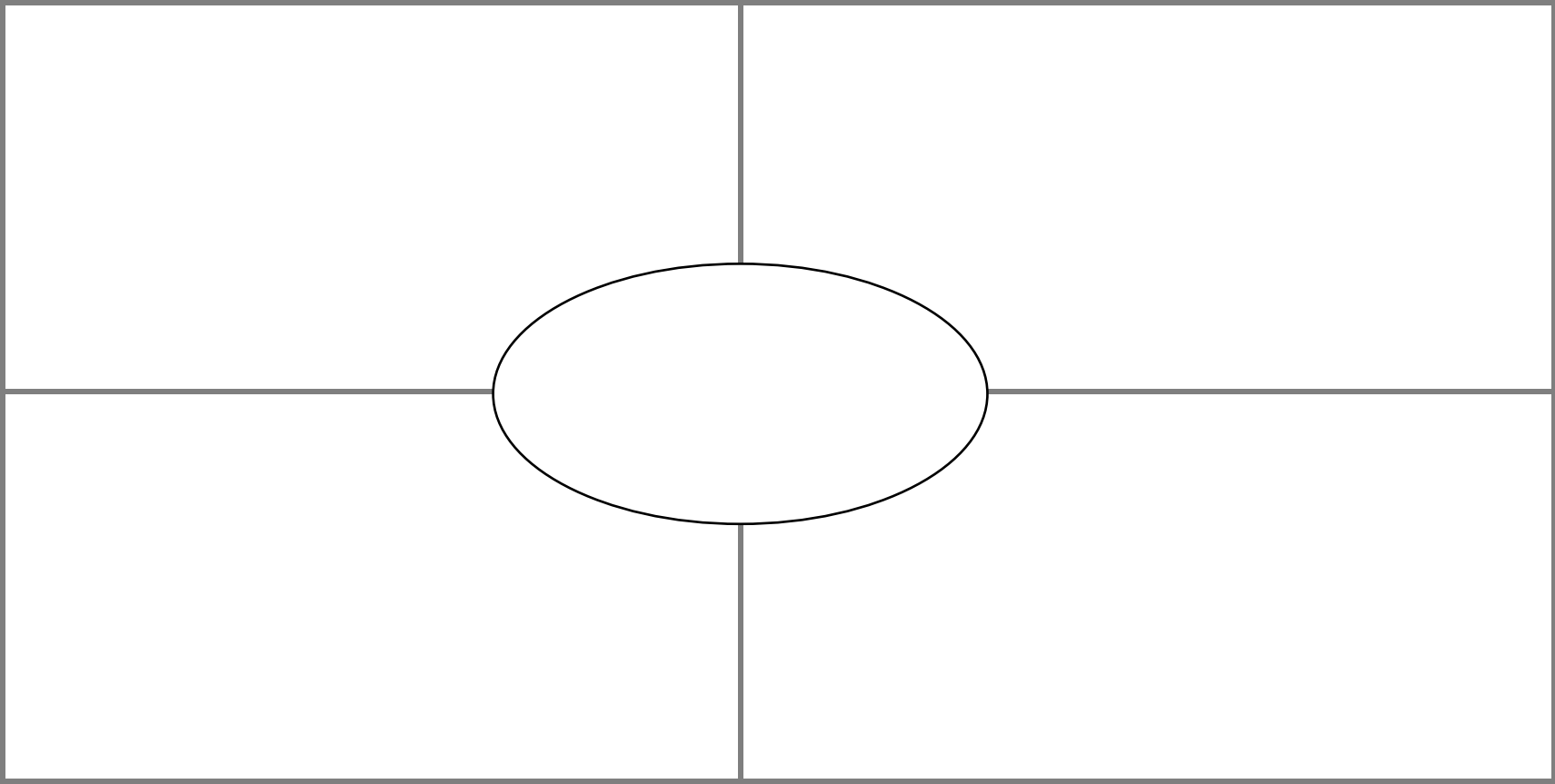
Exponent

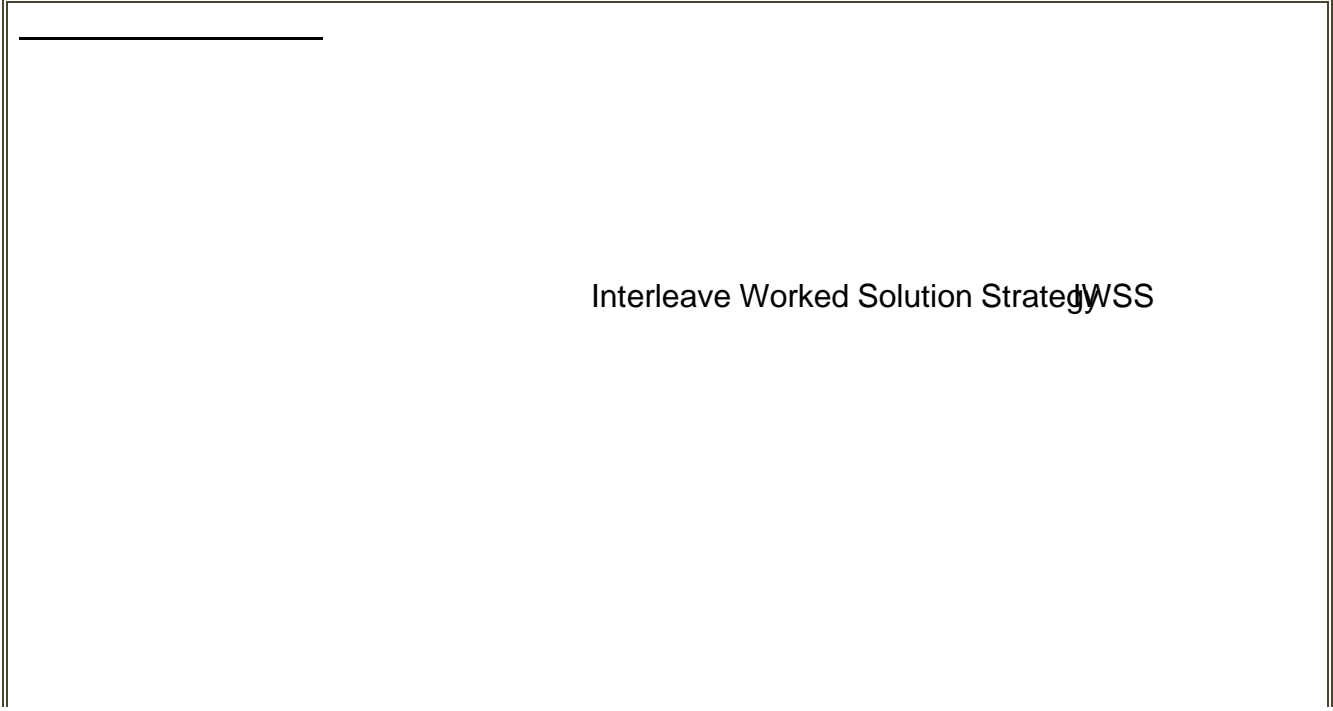
When we use the Frayer model, the first thing we do is write the vocabulary word in the middle circle. Let's write exponent in the circle.

You can see there are also 4 boxes. The first box is labeled Definition. A definition tells us the meaning of the term. An exponent is a number that tells how many times a number called the base gets multiplied by itself. Let's say that together. Now, let's write that in the Definition box.

The next box is Characteristics. This means we want to think of words and pictures and equations that describe exponents that are important to help us understand what it means.

10^6





Interleave Worked Solution Strategy WSS

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$\frac{9}{7} \quad \div$

$\frac{55}{6} \quad \div$

$\frac{59}{8} \quad \div$

$\frac{68}{9} \quad \div$

References

Archer, A. and Hughes, C. (2011). *Explicit Instruction: Effective and Efficient Teaching*. New York, NY: The