Learning Guide 1: Ratios, Rates and Proportional Reasoning

Ref: Math Links 8 (Chapter 2, pp. 42-75)

Name: _____ TA: _____ Teacher: _____

Learning Guide Expectations:

(1) Express ratios using different notations.
(2) use ratios and rates in real-life examples.
(3) solve problems involving rates, ratios and proportional reasoning.

Assignments:

Expectation 1: Express ratios using different notations

- ☐ Watch & take notes
- ☐ Read p. 46-48
- ☐ Complete assignment 1: p. 51-54 — #5, 6, 7, 8, 10, 11, 12, 15, *21

Expectation 2: use ratios and rates in real-life examples

- ☐ Watch & take notes
- ☐ Read p. 56-58
- ☐ Complete assignment 2: p. 60-62 — #4, 6, 7, 8, 10, 11, 13, *18

Expectation 3: Solve problems involving rates, ratios and proportional reasoning

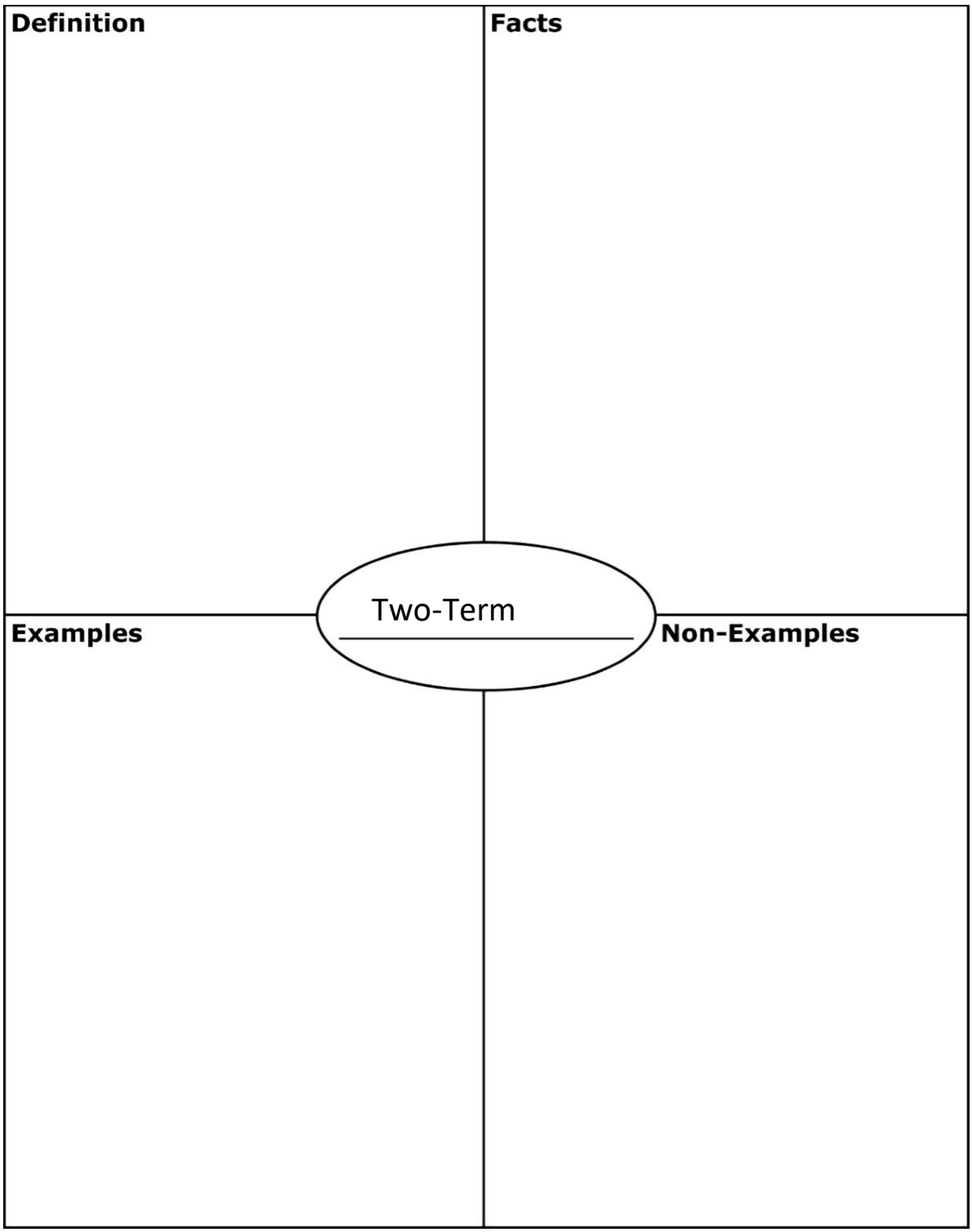
- ☐ Watch & take notes
- ☐ Read p. 64-66
- ☐ Complete assignment 3: p. 67-69— #4, 5, 6, 8, 9, 10, 12, 15, 18, 20, *25

Review and Challenge

- ☐ Complete p. 70-71 #1-6, 8, 11a, *12, 13, 15, 16
- ☐ Complete LG 1 journal
- ☐ Write LG 1 Quiz

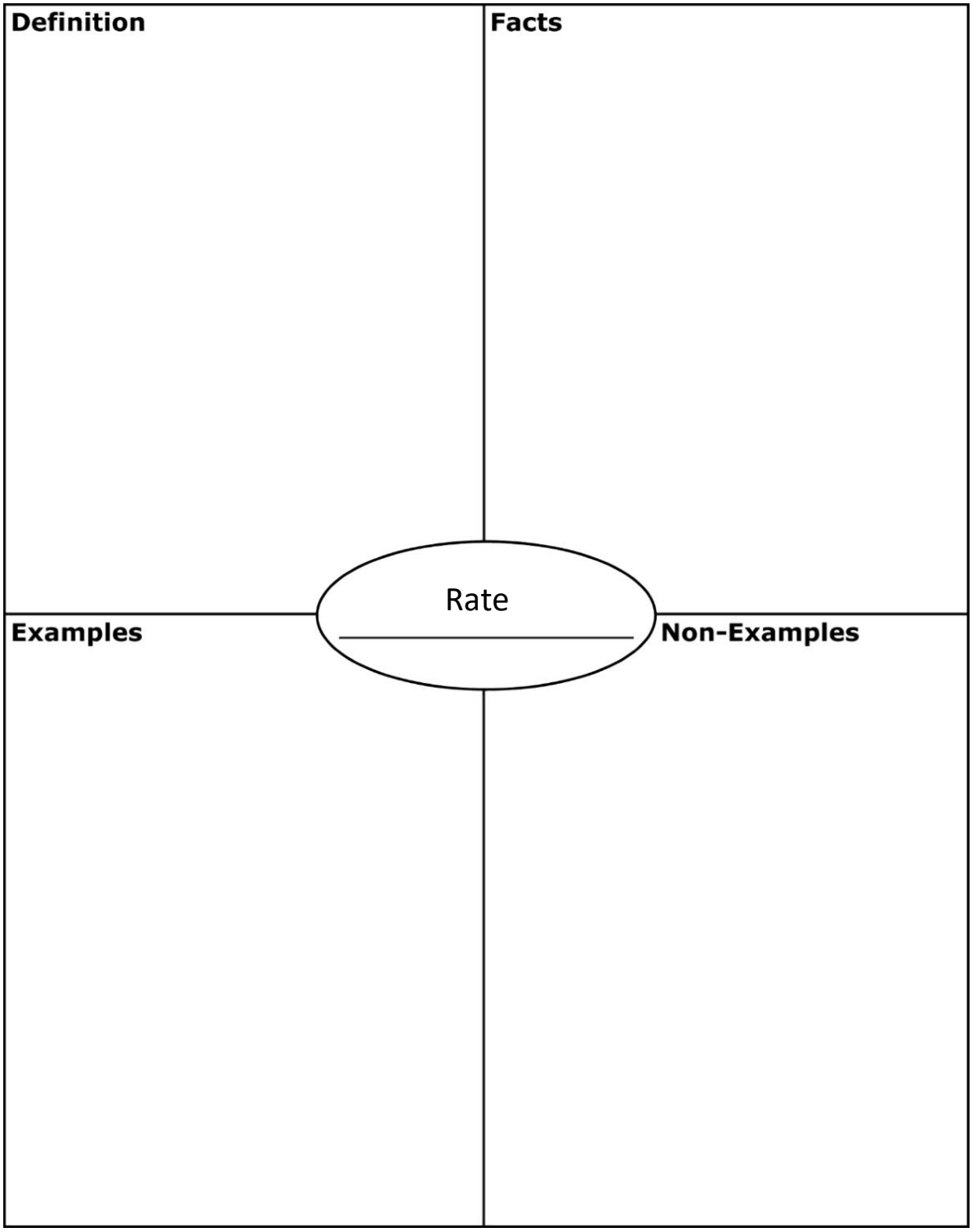
Learning Guide 1 Journal

Complete the following Frayer model using the term: two term ratio. Be sure to use your text to help you complete each section.



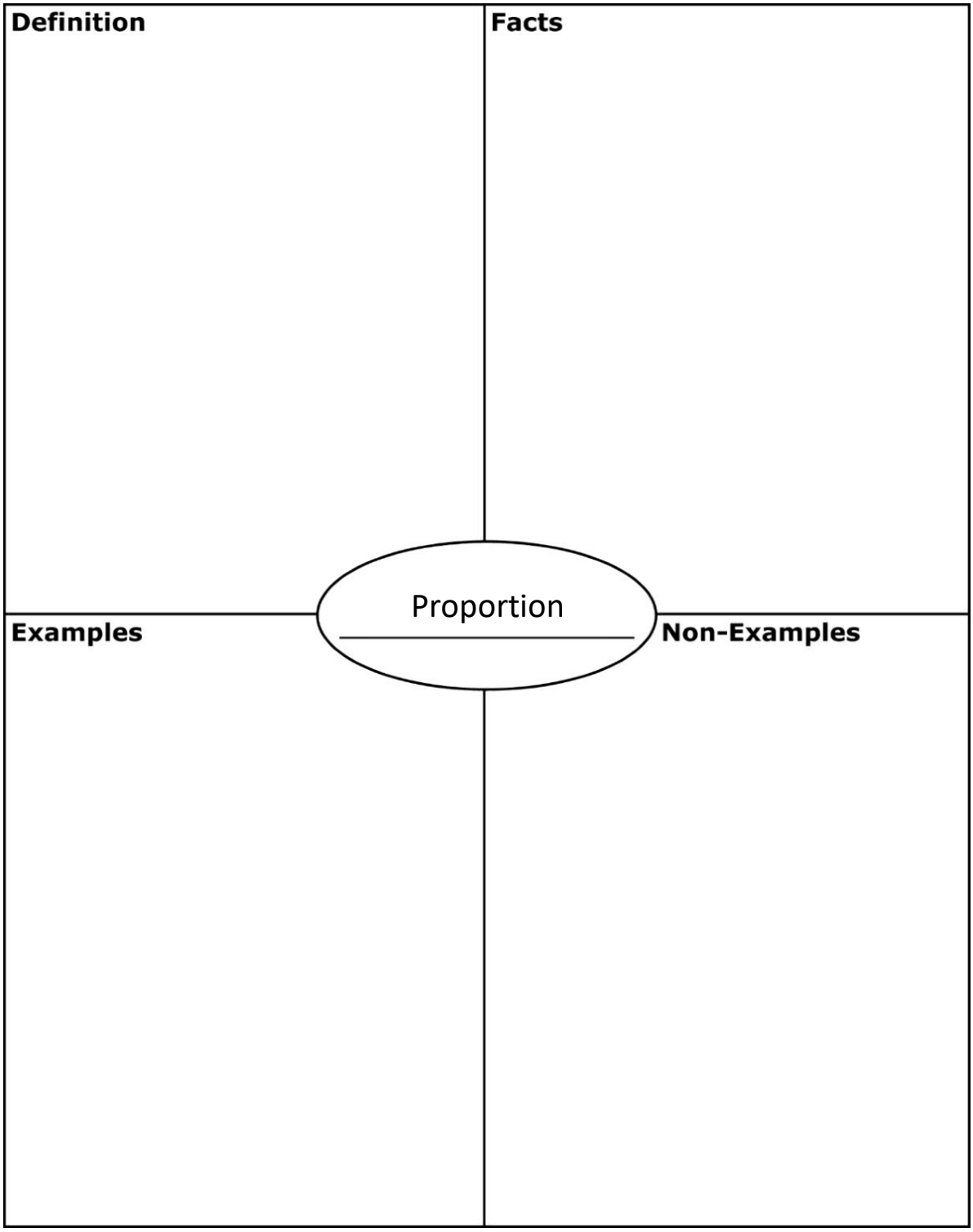
Learning Guide 1 Journal

Complete the following Frayer model using the term: rate. Be sure to use your text to help you complete each section.



Learning Guide 1 Journal

Complete the following Frayer model using the term: proportion. Be sure to use your text to help you complete each section.



Learning Guide 1 Journal

Example 1: What's is the better deal?

STEPS....

1. Set up rate for each item.
2. Find an equal rate for each item.
3. Compare.

Example 2: Compare Prices Using Unit Rates

Brett went to the grocery store to buy his favourite brand of orange juice. He found the following container sizes and prices. Which container of orange juice is the best buy?

FIRST - Convert to the same units. (L to mL)

1 L = 1000 mL

So...

1.89 L = _____mL

Learning Guide 1 Journal

Carton 1: $\frac{414\ mL}{\$1.69} = \frac{mL}{\$\ 1}$

Carton 2: $\frac{mL}{\$2.99} = \frac{mL}{\$\ 1}$

Carton 3: $\frac{mL}{\$} = \frac{mL}{\$\ 1}$

Create your own word problem which uses proportions and show how you then would solve it