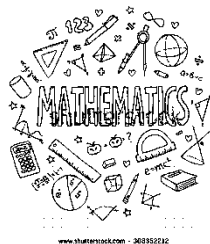


Linear Measurement-



Topics

- ✓ Understand 1 centimetre, 1 meter, and 1 kilometre in terms of concrete objects.
- ✓ Compare the sizes and note relationships between meters and kilometres as conversion equivalencies.

Sprint: Round off these numbers to the nearest thousands.

1	1,400 ~	23	185,700~	
2	3,600~	24	32,600~	
3	5,900~	25	4,400~	
4	9,200~	26	51,200~	
5	7,600	27	120,600~	
6	6,300~	28	499,900~	
7	3,700~	29	232,200~	
8	2,400~	30	89,800~	
9	9,900~	31	67,400~	
10	10,400~	32	299,600~	
11	13,500~	33	320,970~	
12	21,400~	34	99,380~	
13	30,700~	35	21,920~	
14	55,500~	36	4,820~	
15	73,300~	37	9,800~	
16	89,700~	38	900~	
17	90,900~	39	800~	
18	99,200~	40	300~	
19	98,900~	41	3,340~	
20	99,800~	42	999,900~	
21	100,500~	43	199,090~	
22	320,500~	44	254,200~	

Practice: Metre and Centimetre Bonds

150 cm = ____ m ____ cm
570 cm = ____ m ____ cm
312 cm = ____ m ____ cm
205 cm = ____ m ____ cm
435 cm = ____ m ____ cm
1609 cm = ____ m ____ cm
3450 cm = ____ m ____ cm
1500 cm = ____ m ____ cm

Previous Day's Application Problem

Use a tape diagram to draw the information.

Altogether, Martha, George, and Elizabeth score 10,000 points in a video game. Martha scores 3,206 points. George scores 2,094 points.

How many points does Elizabeth score?

Use a tape diagram to draw the information.



Show a reasonable answer for Elizabeth your answer is reasonable.



If you are finished, calculate Elizabeth's actual score.

S.E.A. Application Problems – You have eight (8) minutes to do the next six (6) questions. **TIME YOURSELF**

1. Write in words: 12 540

2. Write in words the number 43,050.

3. What is the value of the digit 8 in the numeral 830,236

4. Write the numeral which represents
 $(2 \times 10\,000) + (6 \times 1\,000) + (3 \times 10) + (7 \times 1)$

5. Write these numbers in ascending order
5173, 5731, 5317

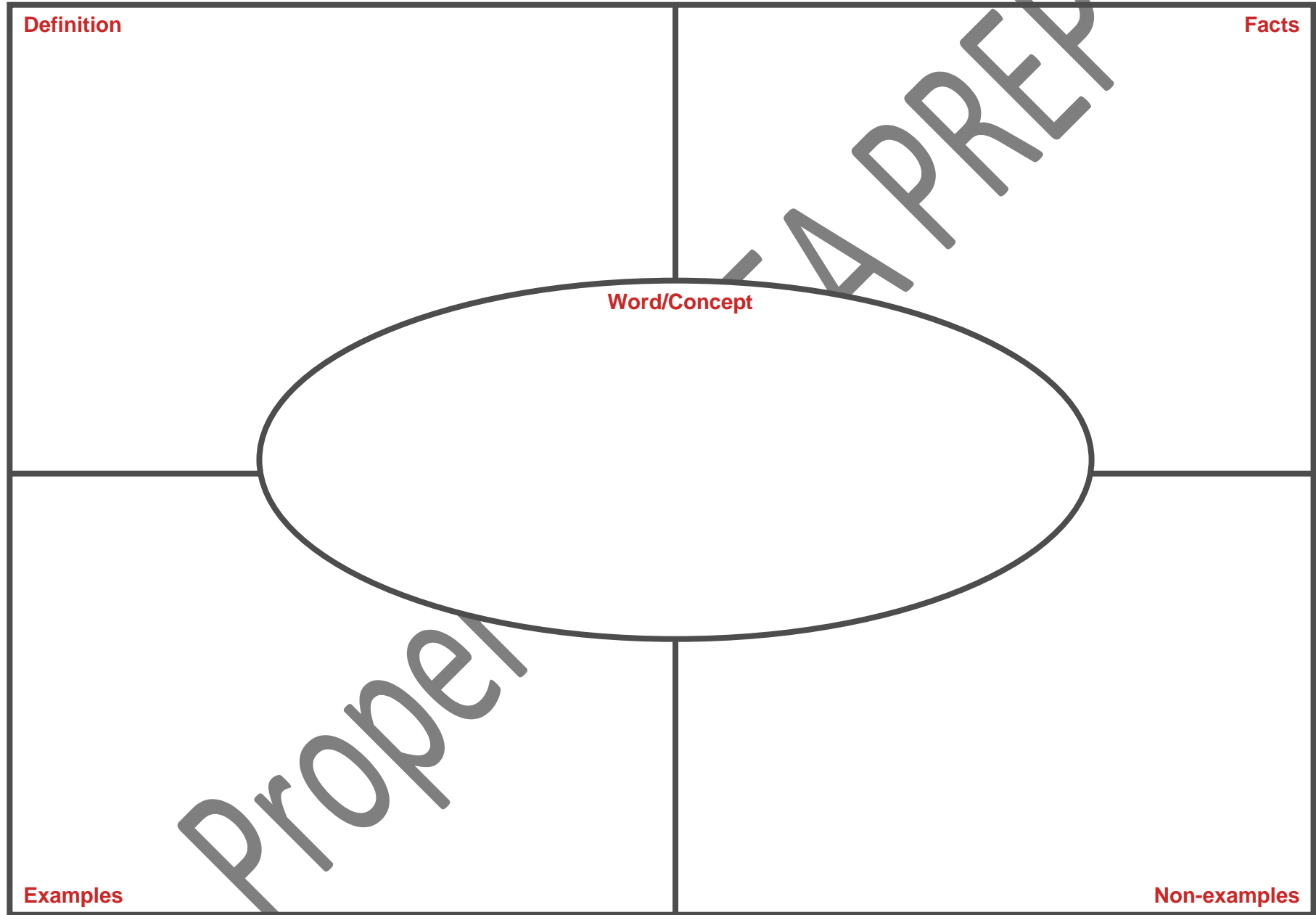
Concept of 1 centimetre | 1 metre | 1 kilometre

Definition	Facts
Word/Concept	
Examples	Non-examples

SEEA PREP

PROPER

Concept of 1 metre



Concept of 1 kilometre

Definition	Facts
Word/Concept	
Examples	Non-examples

Proper

PREP

Compare the sizes and note relationships between meters and kilometres as conversion equivalencies.

1 Kilometre = 1000 metres

1000 metres = 1 kilometre

Converting kilometres into metres is like learning your one thousand time tables.

km	m
1 km	_____
5 km	_____

Try These:

1. Convert the measurements

a) 1 km = _____ m e) 1 m = _____ cm

b) 4 km = _____ m f) 3 m = _____ cm

c) 7 km = _____ m g) 80 m = _____ cm

d) _____ km = 18,000 m h) _____ m = 12,000cm

2. Convert these measurements.

a) 3 km 312 m = _____ m e) 3 m 56 cm = _____ cm

b) 13 km 27 m = _____ m f) 14 m 8 cm = _____ cm

c) 90 km 8 m = _____ m g) 80 m 80 cm = _____ cm

d) 215 km 200 m = _____ m h) 120 m 46 cm = _____ cm

Add mixed units of length using the algorithm or simplifying strategies

Talk for one minute with your partner about how to solve this problem. $5 \text{ km} + 2,500 \text{ m} =$

Algorithm

Other Strategies

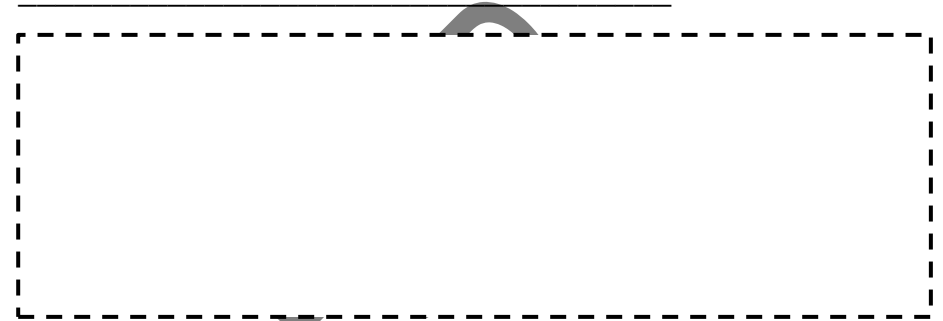
Try These:

Add these. If you have completed try adding them using another strategy.

$$1 \text{ km } 400 \text{ m} + 3 \text{ km } 169 \text{ m}$$

$$7 \text{ km } 130 \text{ m} + 1 \text{ km } 379 \text{ m}$$

$$10 \text{ km } 375 + 3 \text{ km } 530$$



The answer to the problem on the previous page:

(A)

$$\begin{array}{r}
 1 \text{ km } 734 \text{ m} \\
 + 4 \text{ km } 396 \text{ m} \\
 \hline
 5 \text{ km } 1130 \text{ m} \\
 \swarrow \quad \searrow \\
 1 \text{ km } \quad 130 \text{ m} \\
 6 \text{ km } 130 \text{ m}
 \end{array}$$

(B)

$$\begin{array}{r}
 1734 \text{ m} \\
 + 4396 \text{ m} \\
 \hline
 6130 \text{ m} \\
 6 \text{ km } 130 \text{ m}
 \end{array}$$

We can solve using a simplifying strategy.

(C)

$$\begin{array}{l}
 1 \text{ km} + 4 \text{ km} = 5 \text{ km} \\
 734 + 396 = 730 + 400 \\
 \swarrow \quad \searrow \\
 730 \quad 4 \quad = 1130 \\
 5 \text{ km} + 1 \text{ km } 130 \text{ m} = \\
 6 \text{ km } 130 \text{ m}
 \end{array}$$

(D)

$$\begin{array}{l}
 734 + 396 = 1130 \\
 \swarrow \quad \searrow \\
 700 \quad 34 \quad 300 \quad 96 \\
 5 \text{ km} + 1 \text{ km } 130 \text{ m} = 6 \text{ km } 130 \text{ m}
 \end{array}$$

Subtract mixed units of length using the algorithm or simplifying strategies.

$$10 \text{ km} - 3 \text{ km } 140 \text{ m}$$

Other Strategies

Try These:

Subtract these. If you have completed try adding them using another strategy.

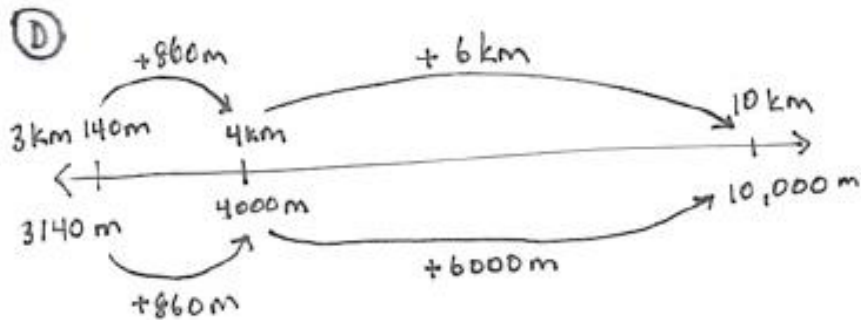
The answer to the problem on the previous page:

$$\textcircled{A} \begin{array}{r} 9 \\ 10,000 \text{ m} \\ - 3,140 \text{ m} \\ \hline 6,860 \text{ m} \end{array}$$

$$\textcircled{B} \begin{array}{r} 9 \text{ km} \\ - 3 \text{ km} \\ \hline 6 \text{ km} \end{array} \begin{array}{r} 1000 \text{ m} \\ 140 \text{ m} \\ \hline 860 \text{ m} \end{array}$$

We can solve using a simplifying strategy.

$$\textcircled{C} \begin{array}{l} 10 \text{ km} - 3 \text{ km } 140 \text{ m} \\ 10 \text{ km} - 3 \text{ km} = 7 \text{ km} \\ 7 \text{ km} - 140 \text{ m} = 6 \text{ km } 860 \text{ m} \\ \swarrow \searrow \\ 6 \text{ km } 860 \end{array}$$



$$\begin{array}{l} 860 \text{ m} + 6 \text{ km} = 6 \text{ km } 860 \text{ m} \\ 860 \text{ m} + 6000 \text{ m} = 6,860 \text{ m} \end{array}$$

Ⓔ

$$\begin{array}{l} 3 \text{ km } 140 \text{ m} \xrightarrow{+860 \text{ m}} 4 \text{ km} \xrightarrow{+6 \text{ km}} 10 \text{ km} \\ 860 \text{ m} + 6 \text{ km} = 6 \text{ km } 860 \text{ m} \end{array}$$

Continue with these:
