

Key for Unit 8 -Lab C with cups

Cup #Objects

1 *People* & Washers

$$2P + 3W + 5 = 5P + 1W + 3$$

2 *Washers* & Bolts

$$1B + 6W + 3 = 5B + 4W + 7$$

3 *Hickory Nuts* & Wire Nuts

$$3H + 5W + 6 = 7H + 3W + 2$$

4 *Toothpicks* & Q-tips

$$2Q + 3T + 5 = 1T + 4Q + 9$$

5 *L-Brackets* & Washers

$$6L + 2W + 2 = 2L + 5W + 6$$

6 *People* & Washers

$$6P + 1W + 2 = 3P + 5W + 4$$

7 *Nails* & Washers

$$4N + 5W + 4 = 1N + 15W + 6$$

8 *Lag Bolts* & Caps

$$4L + 1C + 4 = 6C + 1L + 8$$

9 *Bolts* & Washers

$$1B + 4W + 7 = 4B + 2W + 3$$

10 *People* & Nails

$$3P + 9N + 5 = 6P + 7N + 3$$

11 *Pulleys* & Bolts

$$1P + 6B + 5 = 3P + 2B + 2$$

12 *Toothpicks* & brads

$$2T + 14B + 3 = 4T + 5B + 2$$

13 *People* & Q-tips

$$3P + 1Q + 5 = 1P + 4Q + 9$$

14 *Nails* & Bolts

$$4B + 3N + 5 = 1B + 5N + 1$$

15 *Washers* & Small bolts

$$4W + 1B + 4 = 1W + 3B + 5$$

16 *Big Washers* & Little washers

$$4B + 6L + 2 = 2B + 9L + 6$$

17 *Washers* & Paper Clips

$$4C + 7W + 3 = 6C + 4W + 7$$

Demo *Washers* & Hickory nut

$$3H + 4W + 1 = 6H + 1W + 5$$

Solutions:

1) $P = \frac{2}{3}W + \frac{2}{3}$

2) $W = 2B + 2$

3) $H = \frac{1}{2}W + 1$

4) $T = 1Q + 2$

5) $L = \frac{3}{4}W + 1$

6) $P = 1\frac{1}{3}W + \frac{2}{3}$

7) $N = 3\frac{1}{3}W + \frac{2}{3}$

8) $L = 1\frac{2}{3}C + 1\frac{1}{3}$

9) $B = \frac{2}{3}W + 1\frac{1}{3}$

10) $P = \frac{2}{3}N + \frac{2}{3}$

11) $P = 2B + 1\frac{1}{2}$

12) $T = 4\frac{1}{2}B + \frac{1}{2}$

13) $P = 1\frac{1}{2}Q + 2$

14) $N = 1\frac{1}{2}B + 2$

15) $W = \frac{2}{3}B + \frac{1}{3}$

16) $B = 1\frac{1}{2}L + 2$

17) $W = \frac{2}{3}C + 1\frac{1}{3}$

Demo) $W = 1H + 1\frac{1}{3}$

Notice the first object in each set is written in italics. When you write the number on the cups, you will also write the word in italics on the cup. It is necessary for Unit 11's lab.