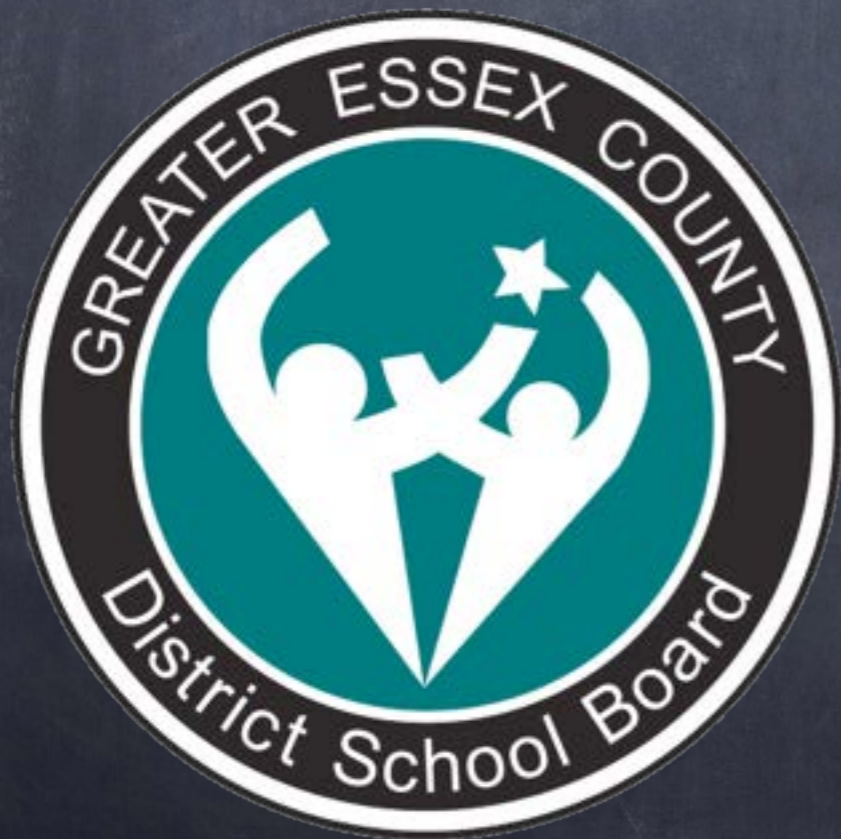


MYCI 2013-14

Middle Years Collaborative Inquiry Session #3



GOOD TEACHING
PRACTICES
+

TECHNOLOGY

= ENGAGEMENT

Slides Available Online



<http://tapintoteenminds.com/myci/session3/>



Agenda

- Sign-in and Welcome
- Team Time: Consolidation of Cycle #2
- Team Time: Planning for Cycle #3
- Full Group: Google Drive for Data
- Full Group: Collecting and Analyzing Evidence
- Ticket Out The Door

MYCI Dates

Sandwich FOS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

MYCI Dates

- Tecumseh Vista FOS
- Central PS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

MYCI Dates

• Walkerville FOS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

MYCI Dates

Essex & Harrow FOS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

MYCI Dates

• Massey FOS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

MYCI Dates

• General Amherst FOS



1/2 Day, as a Family of Schools



1/2 Day, In-School Adobe Connect



Full Day, Learning Fair

Professional Learning Cycle



PLC



- Plan, Act, Observe, Reflect
- 2013-14 MYCI Consists of:
 - Four (4) Cycles - Length of 5 Weeks
- Dates are flexible

- Cloud
- calendar.google.com
- PublicBoard.ca
- Gmail
- Delegates

November-2013

Today

3	4	5	6	7	8	9
10	CYCLE #2					16
17	18	19	20	21	22	23
24	NOV 4 - DEC 6		27	28	29	30
Sun 1	Mon 2	Tue 3	Wed 4	Thu 5	Fri 6	Sat 7

December-2013

October-2013

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26

Calendars



Day

Week

Month

Year



Cloud

alendar.google.com

ublicBoard.ca

mail

Delegates

February-2014

◀ Today ▶

16	17	18	19	20	21	22
CYCLE #3						
23	24	25	26	27	28	1

March-2014

2	3	4	5	6	7	8
FEB 17 - MAR 28						
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

◀ October-2013 ▶

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26

iCloud

calendar.google.com

PublicBoard.ca

Gmail

Delegates

April-2014

◀ Today ▶

Sun 30	Mon 31	Tue 1	Wed 2	Thu 3	Fri 4	Sat 5
CYCLE #4						
6	7	8	9	10	11	12
13	14	15	16	17	18	19
MAR 31 - MAY 2						
20	21	22	23	24	25	26
27	28	29	30	1	2	3

October-2013

Su	Mo	Tu	We	Th	Fr	Sa
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

Cycle #3 Timeline

- **Week #1** - Working Levels Based on Rubrics
- **Week #2** - Collect Evidence From Marker Students and implement specific change in practice.
- **Week #3 & #4** - Continue with change in practice.
- **Week #5** - Working Levels Based on Rubrics
- **Week #6** - Collect Evidence From Marker Students and Data Analysis

Professional Learning Cycle



Act



- Specific changes of practice related to your inquiry question for each cycle

Observe



- Observe students
- Collect data
- Share

Evidence



- At the beginning of a cycle, record the working level of **each** student in your class (Level 1-4).
- At the end of a cycle, record the working level of **each** student in your class (Level 1-4).

Evidence



- Working levels are with respect to the start and end of the cycle, not their overall math mark.
- Measuring working levels with respect to the **specific student learning need** (i.e.: communication)

Expectations



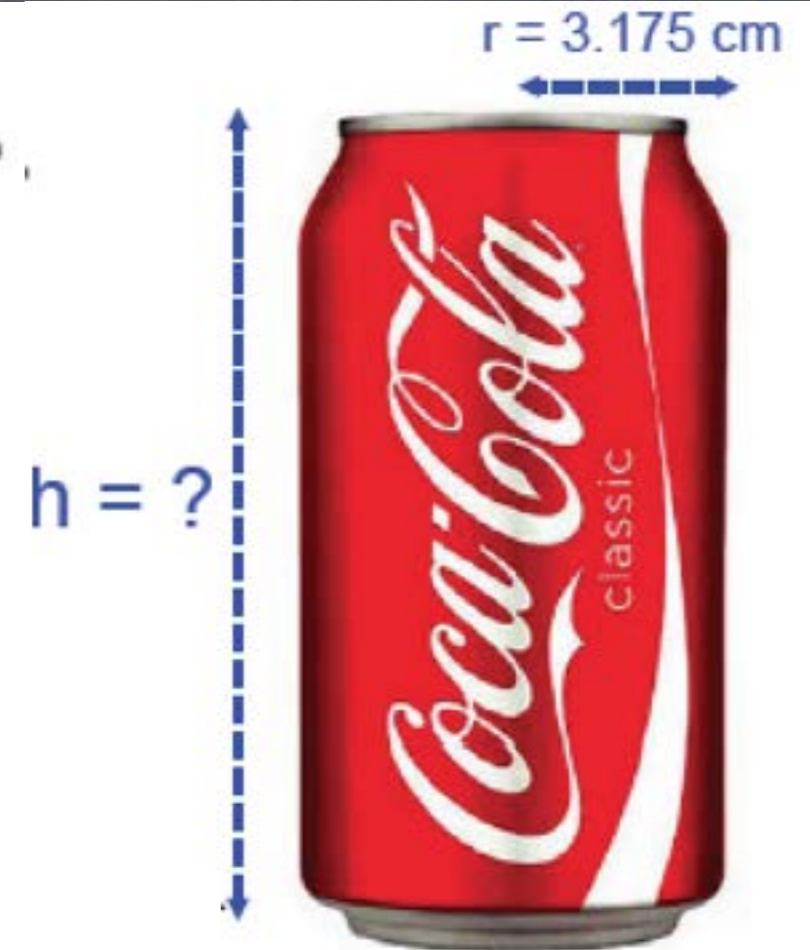
- Select a **minimum** of two (2) level 1 and two (2) level 2 students.
- Collect more detailed evidence/data to track their progress throughout each cycle.

Exemplar: Beginning of Cycle

Some dimensions of a can Coca-Cola are given below. Use the formula for volume of a cylinder to determine the height.

Assume the can is a perfect cylinder.

$$355 = \pi (3.175)^2 h$$
$$355 = 31.6532 \text{ cm}^2 h$$



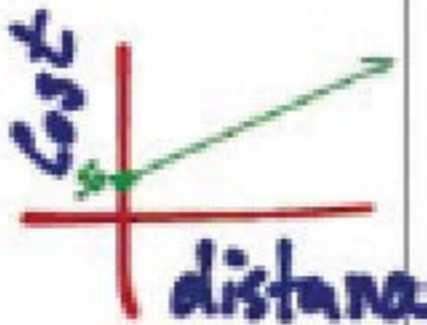
$$V = 355 \text{ ml}$$

Recall $1 \text{ ml} = 1 \text{ cm}^3$

Exemplar: Beginning of Cycle

1. Renting a car for the weekend costs \$50 plus \$0.16/km.

$$C = 50 + 0.16d$$



How far could you drive if you could only afford a bill of \$100 total for the weekend?

$$\begin{aligned}
 C &= 50 + 0.16L \\
 100 &= 50 + 0.16L \\
 100 - 50 &= 50 - 50 + 0.16L \\
 50 &= 0.16L \\
 \frac{50}{0.16} &= \frac{0.16L}{0.16} \\
 312.5 &= L
 \end{aligned}$$

Reflect



At the end of each cycle, analyze your evidence and record:

- What worked?
- What didn't?
- What will you change next cycle?



Paul's Quilt

EQAO Winter Assessment Grade 9 Applied 2005-2006, Question 2b [Adapted]



Paul's grandmother is sewing a quilt for him. A quilt consists of pieces of fabric of different shapes sewn together.

Paul's grandmother asks him to cut red and white pieces. Every 5 pieces in the quilt consist of 2 red pieces and 3 white pieces.

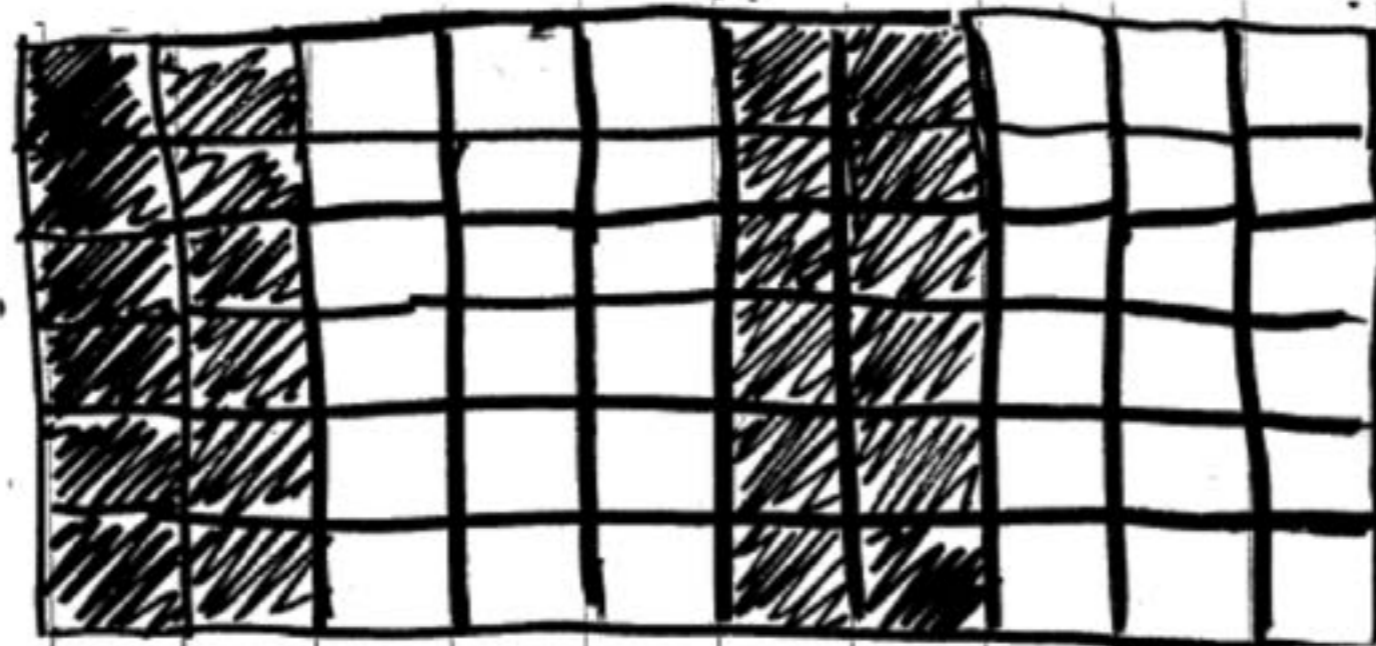
If the quilt has a total of **60** pieces, how many pieces are there of each colour?

Show your work.

Paul's Quilt

Solution

Sample 1



Red
24 : 36 White
By 2's : 12 Groups

Red : White
2 : 3

Paul's Quilt

Red : White
2 : 3

for every 2 reds, there's
3 Whites, and it has to = 6

$$2 + 3 = 5 \text{ \& } 5 \times 12 = 60$$

$$\text{So } 5 \times 2 \text{ by } 12 = 24 \text{ red}$$

$$\text{\& } 3 \text{ by } 12 = 36 \text{ then I added}$$

$$24 + 36 = 60$$

Sample 2
it

Paul's Quilt

Red : White
2 : 3

$\frac{2}{3} = \frac{20}{30} = 50 \text{ (X)}$

$\frac{2}{3} = \frac{30}{45} = 75 \text{ (X)}$

There are 24 pieces of red, and 36 pieces of white.

$\frac{2}{3} = \frac{24}{36} = 60 \checkmark$

Sample 3

Paul's Quilt

Paul's Quilt ~~Sample 4~~

red	white	
••	000	2 3
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	
••	000	

12 rows

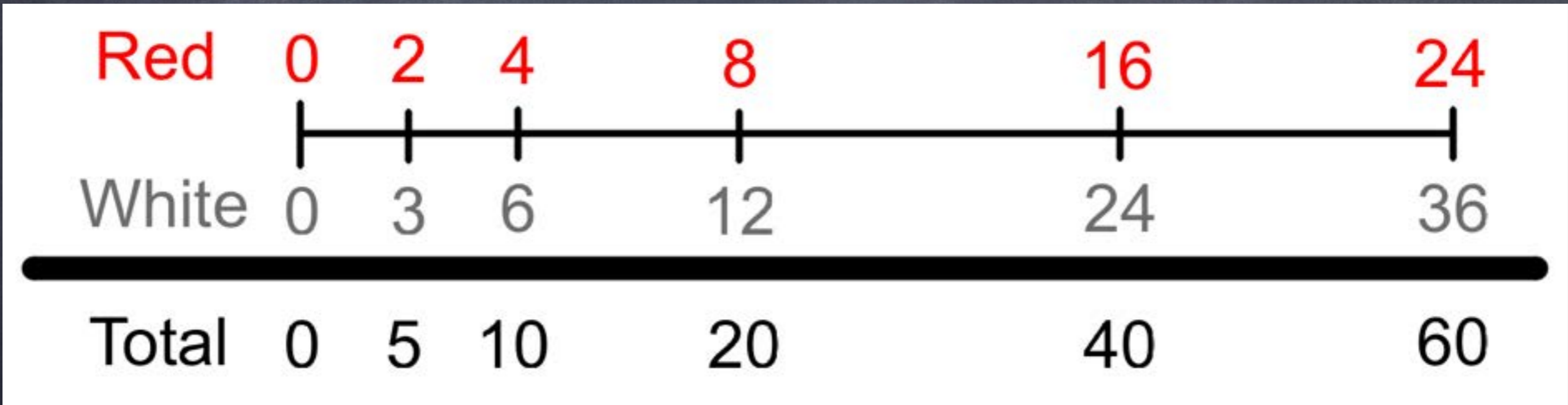
24 36 $24 + 36 = 60$

$\begin{matrix} \times 12 \\ \hline 24 \\ \hline \times 12 \\ 36 \end{matrix}$

Red : White
2 : 3

The Unknown Connections

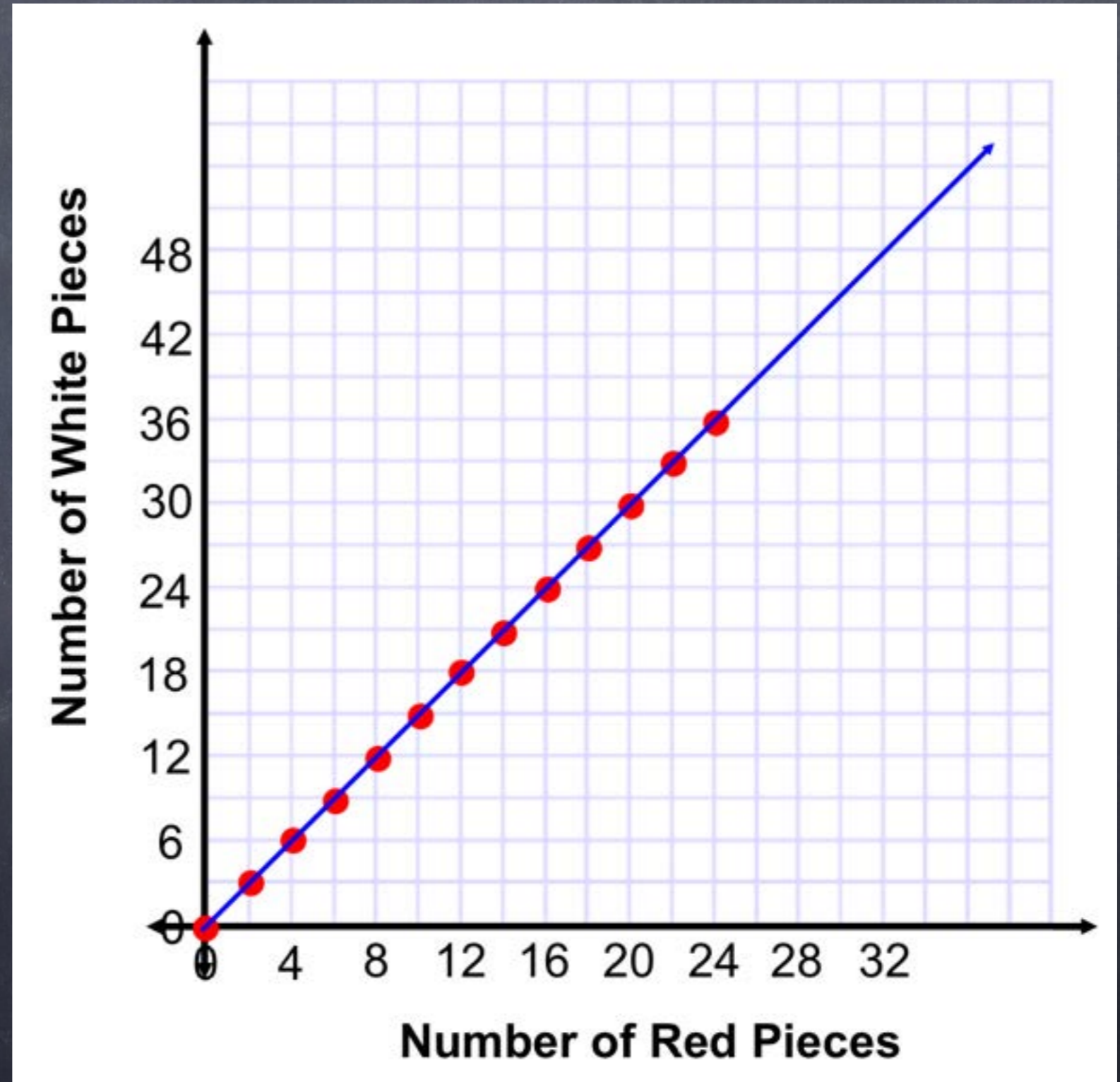
Red : White
2 : 3



The Unknown Connections

Red : White
2 : 3

Red	White
0	0
2	3
4	6
6	9
12	18
24	36



The Unknown Connections

	Red	White	
	0	0	
2			3
2	2	3	3
2	4	6	3
2	6	9	3
6	12	18	9
12	24	36	18

Red : White
2 : 3

The Unknown Connections

Red : White
2 : 3

	Red	White
	0	0
2	2	3
2	4	6
2	6	9
6	12	18
12	24	36

$$\frac{18 \text{ White}}{12 \text{ Red}} = \frac{9 \text{ White}}{6 \text{ Red}}$$

$$\frac{3 \text{ White}}{2 \text{ Red}} = \frac{1.5 \text{ White}}{1 \text{ Red}}$$

Rate of
1.5
Change

The Unknown Connections

Rate of
1.5
Change

$$= \frac{1.5 \text{ White}}{1 \text{ Red}} = \frac{3 \text{ White}}{2 \text{ Red}}$$

$$= \frac{150 \text{ White}}{100 \text{ Red}}$$

$$= 150\%$$

"For every 1.5 white pieces, we need 1 red piece."

"For every 3 white pieces, we need 2 red pieces."

Exit Survey



<http://tapintoteenminds.com/myci/session3/>

- ALL Team Members Should Complete the Exit Survey

Need Assistance?



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