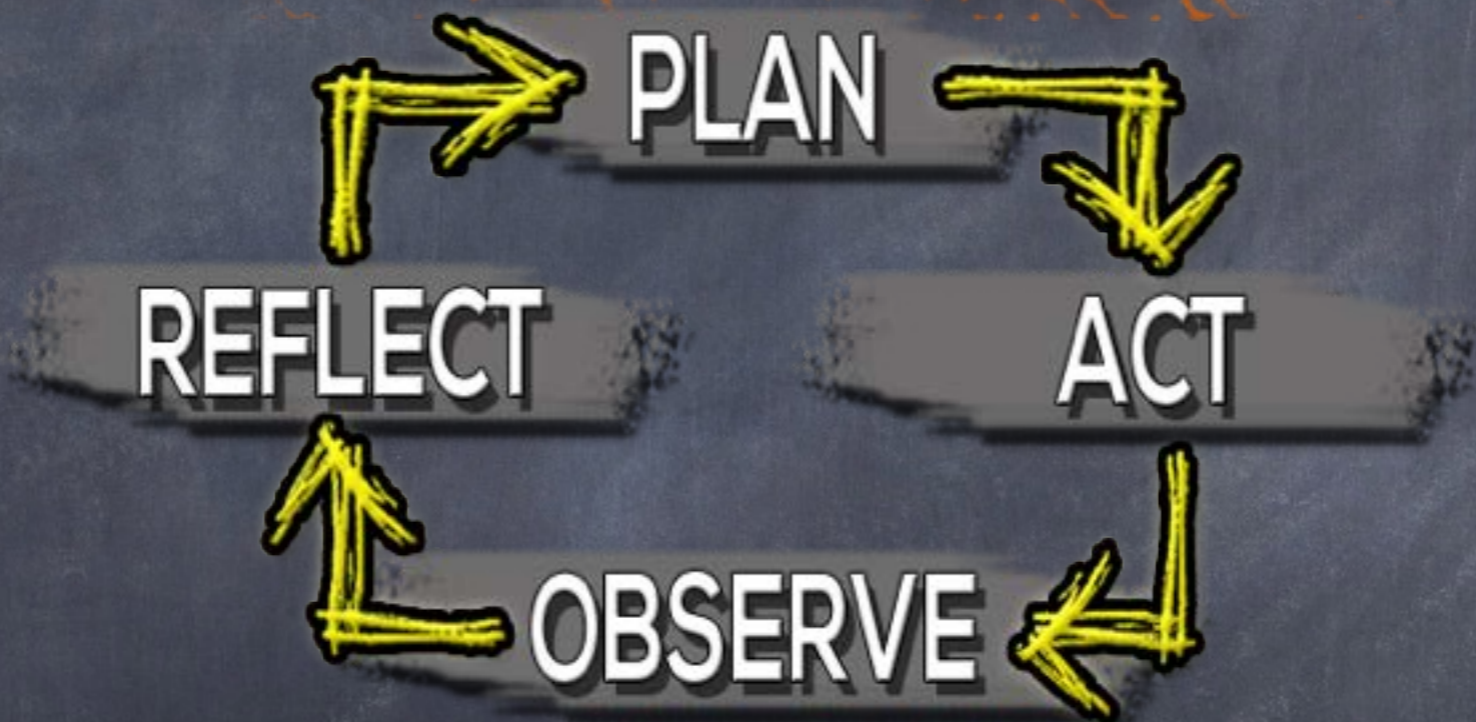


MYCI 2013-14

Middle Years Collaborative Inquiry

www.tapintoteenminds.com



MATHEMATICS

SESSION #4



@MathletePearce



www.tapintoteenminds.com



@JustinLevack

Agenda

- Sign-in
- Analyze Cycle 1 & 2 Data
- Submit Cycle 1 & 2 Data
 - Celebrate MYCI Boardwide Successes
- Planning for Cycle #3 / Team Prompts
- More Connections from Grade 7-10
- Ticket Out The Door



MYCI Dates

◉ Walkerville FOS



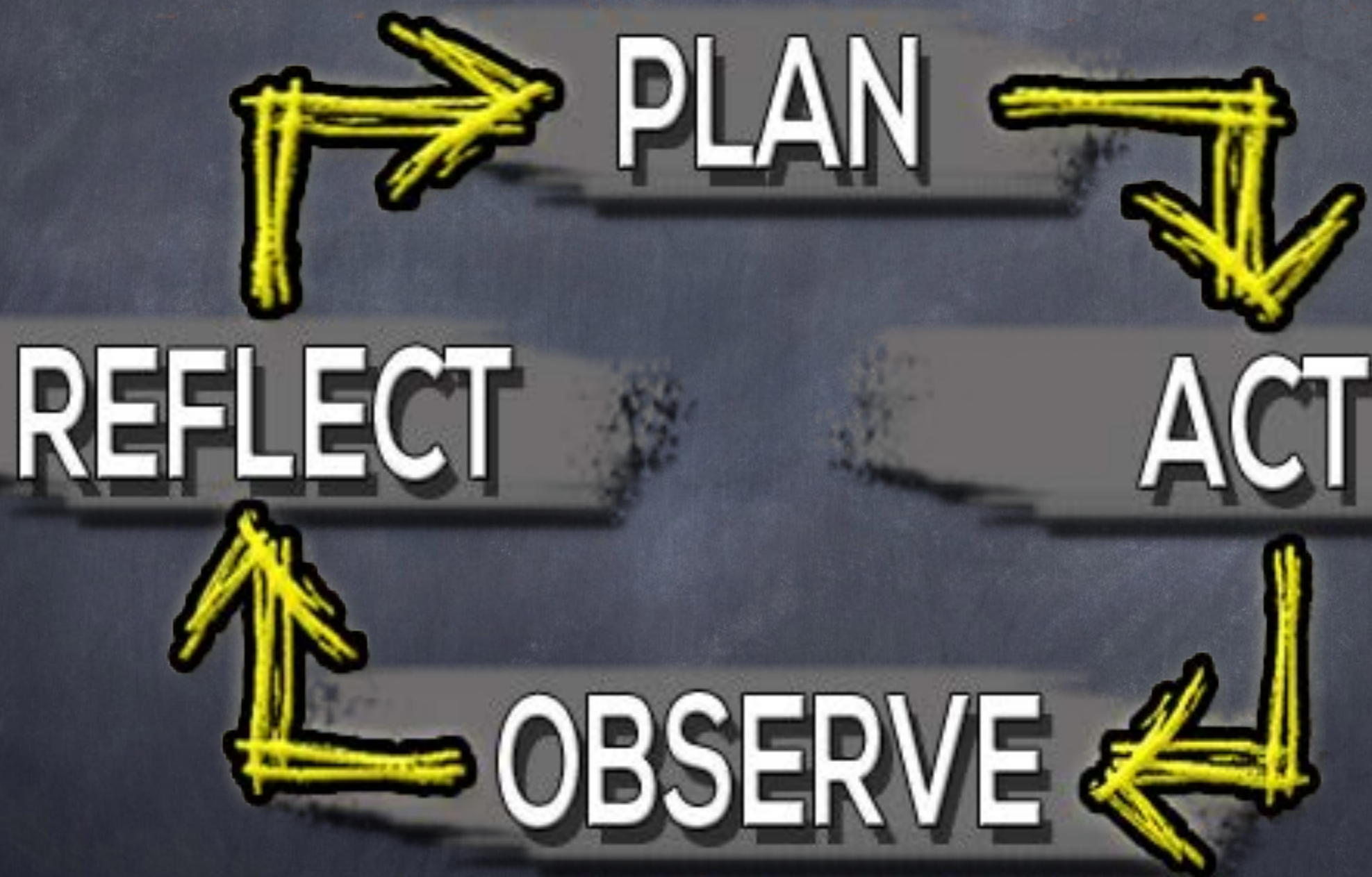
1/2 Day, In-School Adobe Connect



Full Day, Learning Fair
Ciociaro Club



Professional Learning Cycle



Calendars



Day

Week

Month

Year



Cloud

calendar.google.com

PublicBoard.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

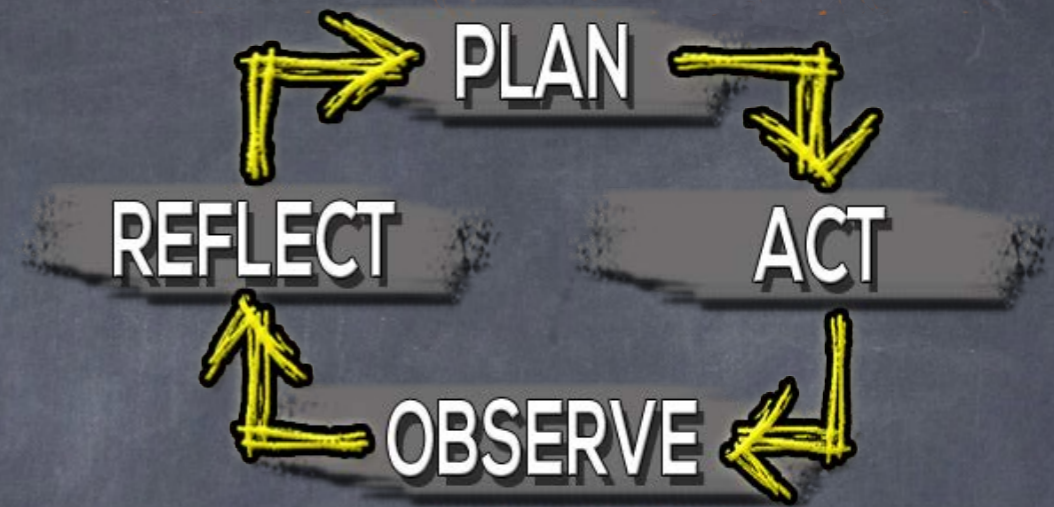
◀ Today ▶

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 Timeline



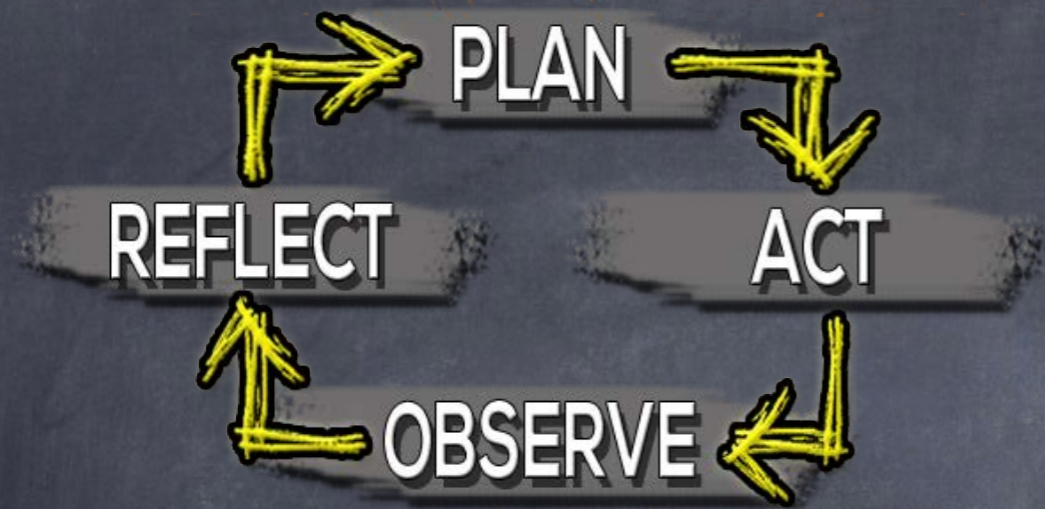
- **Week 1** – Working Levels Based on Rubrics
- **Week 2** – Marker Student Evidence and implement specific change in practice
- **Weeks 3 & 4** – Continue change in practice
- **Week 5** – Working Levels Based on Rubrics
- **Week 6** – Collect Marker Student Evidence

Sample Rubrics

MYCI – Rubric – Student Learning Need – COMMUNICATION

Cycle 1: Week 1: Student Name _____

Criteria	Level 1	Level 2	Level 3	Level 4
Refers to question when answering	Student rarely uses question to guide communication of answer	Student seldom uses question to guide communication of answer	Student uses question to guide communication of answer adequately	Student uses question to guide communication of answer very well
Use of prior knowledge	Student communicates prior knowledge use to answer question poorly	Student communicates prior knowledge use to answer question with limited effectiveness	Student communicates prior knowledge use to answer question adequately	Student communicates prior knowledge use to answer question very well
Organization of thoughts	Student communicates ideas with little to no organization	Student communicates ideas with some organization	Student communicates ideas with adequate organization	Student communicates ideas very well organized ideas.

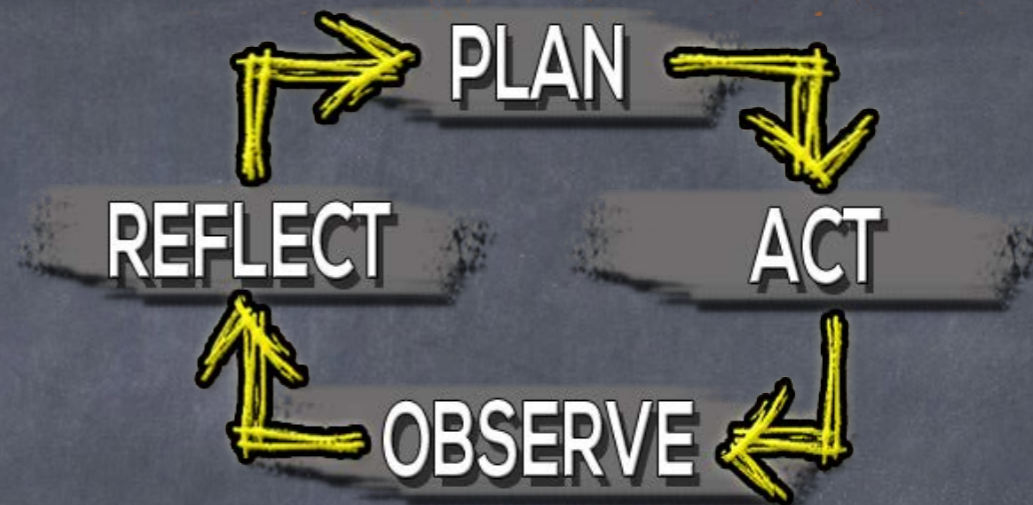


Evidence

- Collect evidence from marker students and beginning and end of each cycle.
- Assessing through lens of your team **specific student learning need.**



Reflect



During Cycle #2:

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



Baby Beats



TapintoTeenMinds.com



Rates of Change in the Body

REAL WORLD MATH

WWW.TAPINTOTEENMINDS.COM

Baby Beats

Watch the video clip.

Consider:

- How fast is the baby's heart beating?
- What is the **slope** or **rate of change**?



Estimate:

_____ beats per 10 seconds?

_____ beats per 30 seconds?

_____ beats per 1 minute

Baby Beats



TapintoTeenMinds.com

Baby Beats



Rates of Change in the Body

REAL WORLD MATH

WWW.TAPINTOTEENMINDS.COM

Baby Beats

Watch the video clip.

Consider:

- How fast is the baby's heart beating?
- What is the *slope* or *rate of change*?



Estimate: |

10 beats per 10 seconds?

30 beats per 30 seconds?

100 beats per 1 minute

$$\frac{18 \text{ beats}}{7.12 \text{ sec}} = \frac{151.74 \text{ beats}}{60 \text{ sec}}$$

$\times 8.43$

$$60 \div 7.12 = 8.43$$

Baby Beats

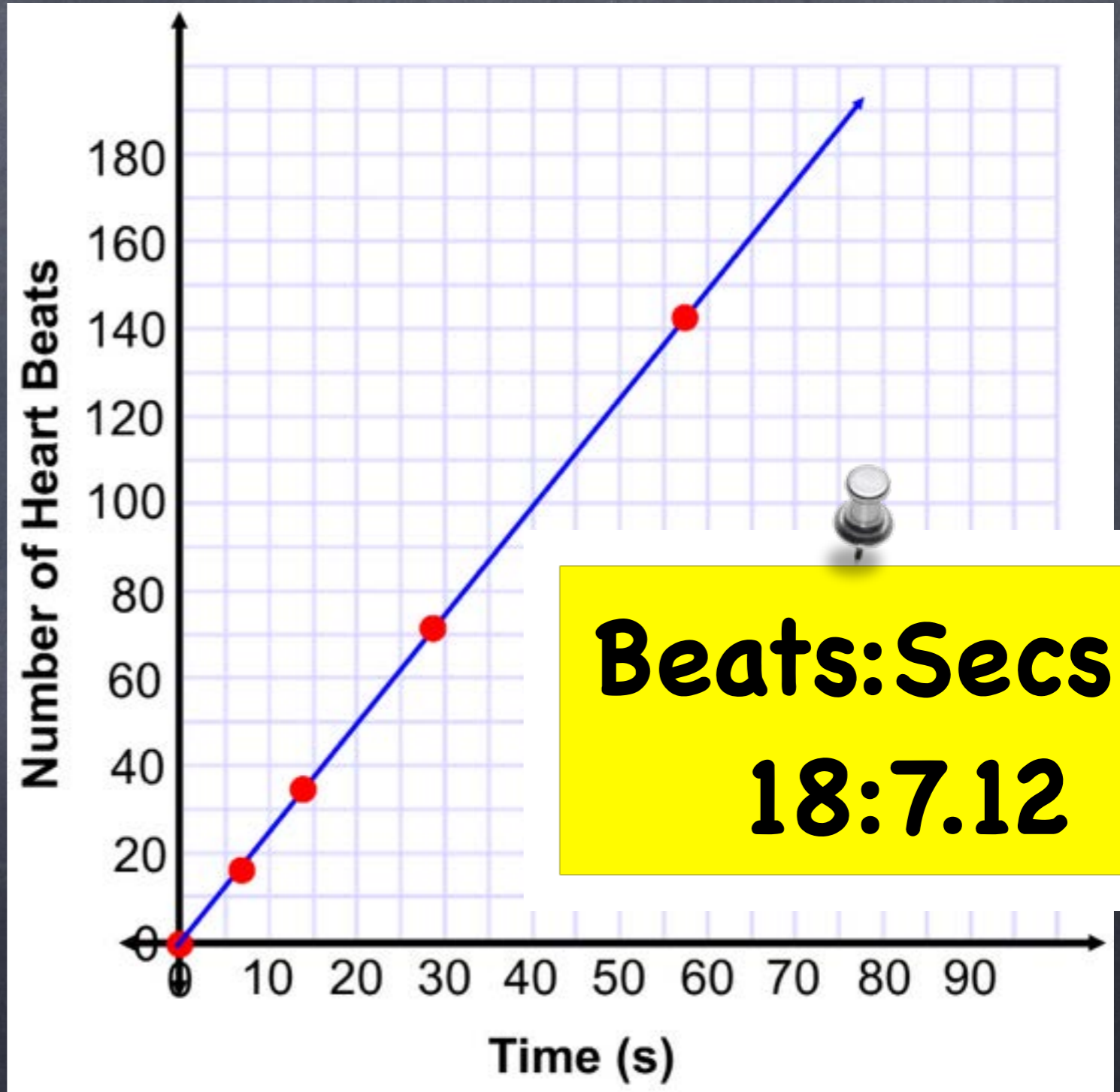


00:00:00;00

TapintoTeenMinds.com

Baby Beats: The Connections

Time (s)	# of Beats
0	0
7.12	18
14.24	36
28.48	72
56.96	144



Baby Beats: The Connections

Time (s)	# of Beats
0	0
7.12	18
14.24	36
28.48	72
56.96	144

7.12

18

Beats:Secs
18:7.12

18 beats
~~7.12~~ sec.

=

2.528 beats
~~1~~ sec.

**Rate of
Change**

Baby Beats: The Connections

Rate of Change

The image shows three yellow sticky notes pinned to a dark background. The first note has the text $\frac{2.528 \text{ beats}}{1 \text{ sec.}}$. The second note has the text $\frac{252.8 \text{ beats}}{100 \text{ sec.}}$. The third note has the text 252.8% . The notes are connected by equals signs, illustrating the conversion of the rate from beats per second to a percentage.

$$\frac{2.528 \text{ beats}}{1 \text{ sec.}} = \frac{252.8 \text{ beats}}{100 \text{ sec.}} = 252.8\%$$

“The baby’s heart beats 252.8 times per 100 seconds, or 252.8% of the time.”

Time (s)	# of Beats
0	0
7.12	18
14.24	36
28.48	72
56.96	144

7.12

18

**Initial Value
is 0**

**18 Beats
7.12 Sec.**

$$B = \text{Initial Value} + \text{Rate of Change} \cdot t$$

$$B = \text{Initial Value} + \text{Rate of Change } t$$

$$B = 0 + \frac{18}{7.12} t$$

$$B = 0 + 2.528 t$$

“Starting at zero, the number of heart beats increase by 2.528 beats per 1 second.”

Road Trip!

EQAO Assessment Grade 9 Applied 2012

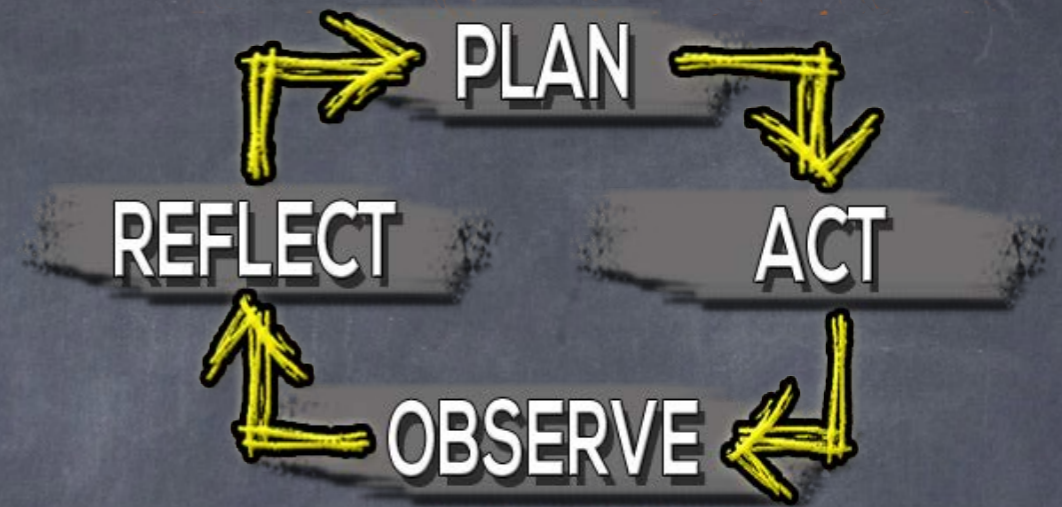
Paul drives from home to his friend's house and then back home.

- The distance from Paul's home to his friend's house is about 720 km.
- On average Paul's car uses 6.8 L of gas for every 100 km.
- Gas costs 96.5 cents a litre.

How much does Paul pay in total for gas to his friend's house and back home?
Show your work.

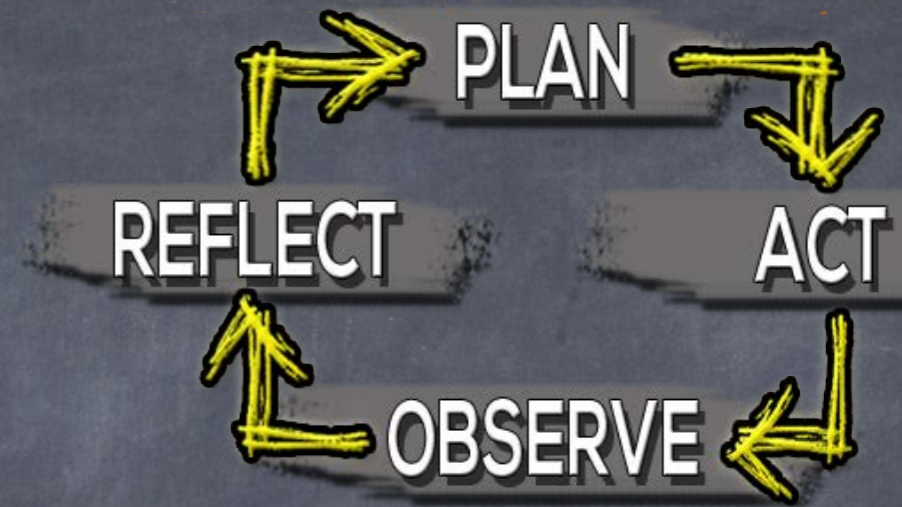


Team Prompts



- Check your Google Drive Team Folder for a folder called Session #4.
- Open the Google Doc called “Team Prompts – Session #4”
- Have an open discussion and collaborate while documenting your responses simultaneously in the Document.

Consider Cycle #2



- Did you follow through with your planned specific change in teaching practice?
- Did the change help address the student learning need? Why or why not?
- What data/evidence did you collect that indicated the effectiveness of the change in practice?

Exit Survey

- Slides from Session #4 Also Available



<http://tapintoteenminds.com/myci/session4/>

- ALL Team Members Should Complete the Exit Survey

Need Assistance?



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Kyle