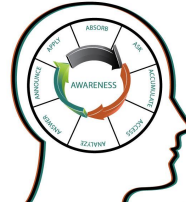




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# Develop Your Data Mindset

## Module 8 - Progress Monitoring Part 2 - Background Knowledge (Graphing & Data Cycles)

By Nathan Anderson, Amy Ova, Wendy Oliver, and Derrick Greer

# Learning Goals

- Increase knowledge of the purpose of progress monitoring
- Increase knowledge of key elements on a progress monitoring graph
- Increase knowledge of 5 unique data cycles relevant to progress monitoring

# SLDS Data Use Standards

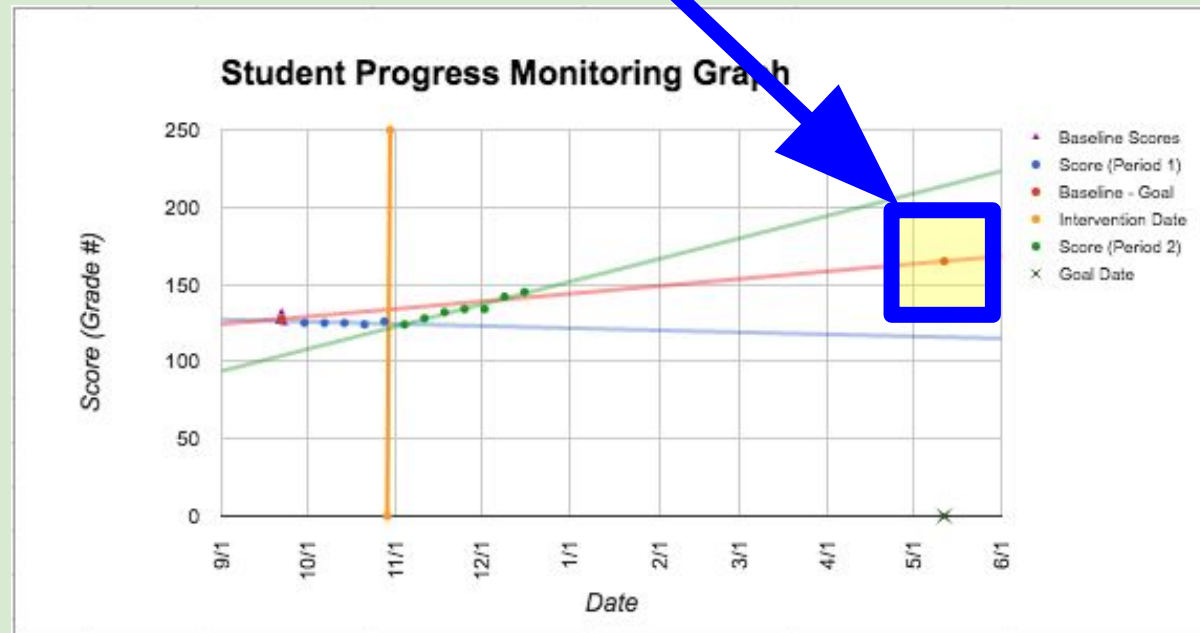
- K.1.D Types of Measures: Knows various types and purposes of ASSESSMENTS and other MEASURES
- K.1.E Data Metric: Knows that MEASURES can be broken down into data metrics, which are calculated for ANALYSIS and monitored for changes (p. 7)
- K.2.D Data Context: Knows the circumstances and purposes for which data are collected
- S.4.C Aligned Analysis: Using appropriate technologies, conducts ANALYSIS suitable for the type of data collected, the VARIABLES identified, and the questions or hypotheses posed
- S.6.B Explanation: Explains different data representations and distinguishing features (e.g., histograms, bar charts, contingency tables)
- S.7.A Strategies: Identifies appropriate strategies grounded in evidence to address the needs and goals identified during data ANALYSIS

# Activity - 08.02.01

The student's \_\_\_\_\_ is plotted, which represents the student's desired end-of-year score. The desired score may be based on the student's grade-level end-of-year benchmark, the national norm weekly rate of improvement, or the student's probe scores. At Great Plains, we typically establish a student's end-of-year goal score based on the end-of-year benchmark method.

- end-of-year goal score
- beginning-of-year goal
- baseline value
- intervention score

Standard: S.6.B Explanation



# Activity - 08.02.02

A \_\_\_\_\_ is a pre-determined level of performance on a screening test that is considered representative of proficiency or mastery of a certain set of skills

- benchmark
- data point
- goal line
- aim line

Standard: K.1.E Data Metric

# Activity - 08.02.03

At Great Plains, we define an end-of-year benchmark as the end-of-year score that represents the 50th percentile based on the assessment vendor's norm study. According to values in the table, if your student's end-of-year goal in Oral Reading Fluency is established using the benchmark method, your student's goal would be set at \_\_\_\_\_.

- 167
- 17
- 224
- 141

Standard: S.4.C Aligned Analysis

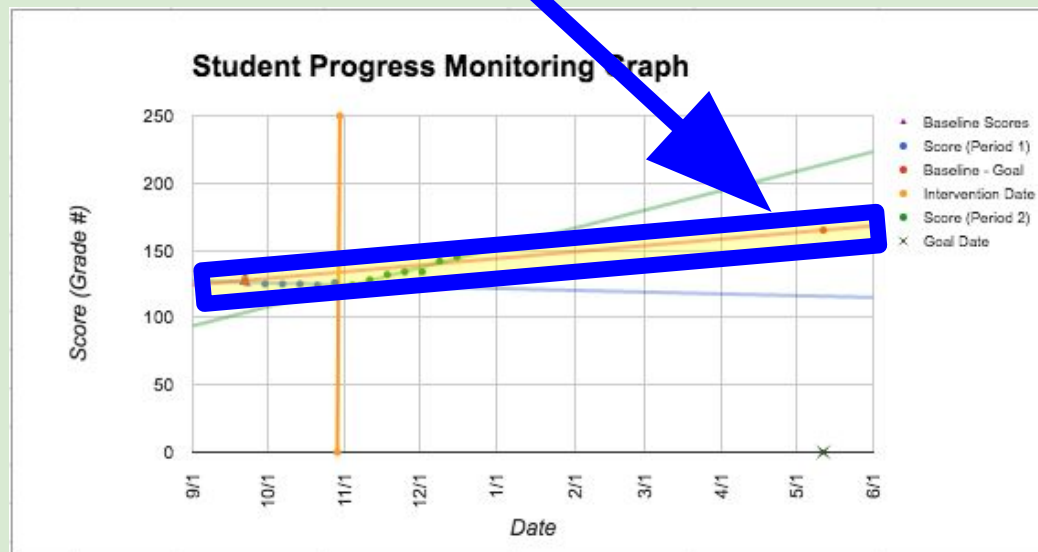
<b>Grade # Reading General Outcome Measures</b>						
<b>Percentile</b>	<b>Oral Reading Fluency</b>			<b>Reading Comprehension</b>		
	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>
10th	94	96	102	11	11	11
25th	116	130	134	15	13	14
50th	141	158	167	17	16	17
75th	166	185	200	19	18	19
90th	191	211	224	20	19	20

# Activity - 08.02.04

A(n) \_\_\_\_\_ is drawn for the student, which is a line connecting the baseline score with the end-of-year goal score to represent the progress a student is expected to make in order to achieve the goal.

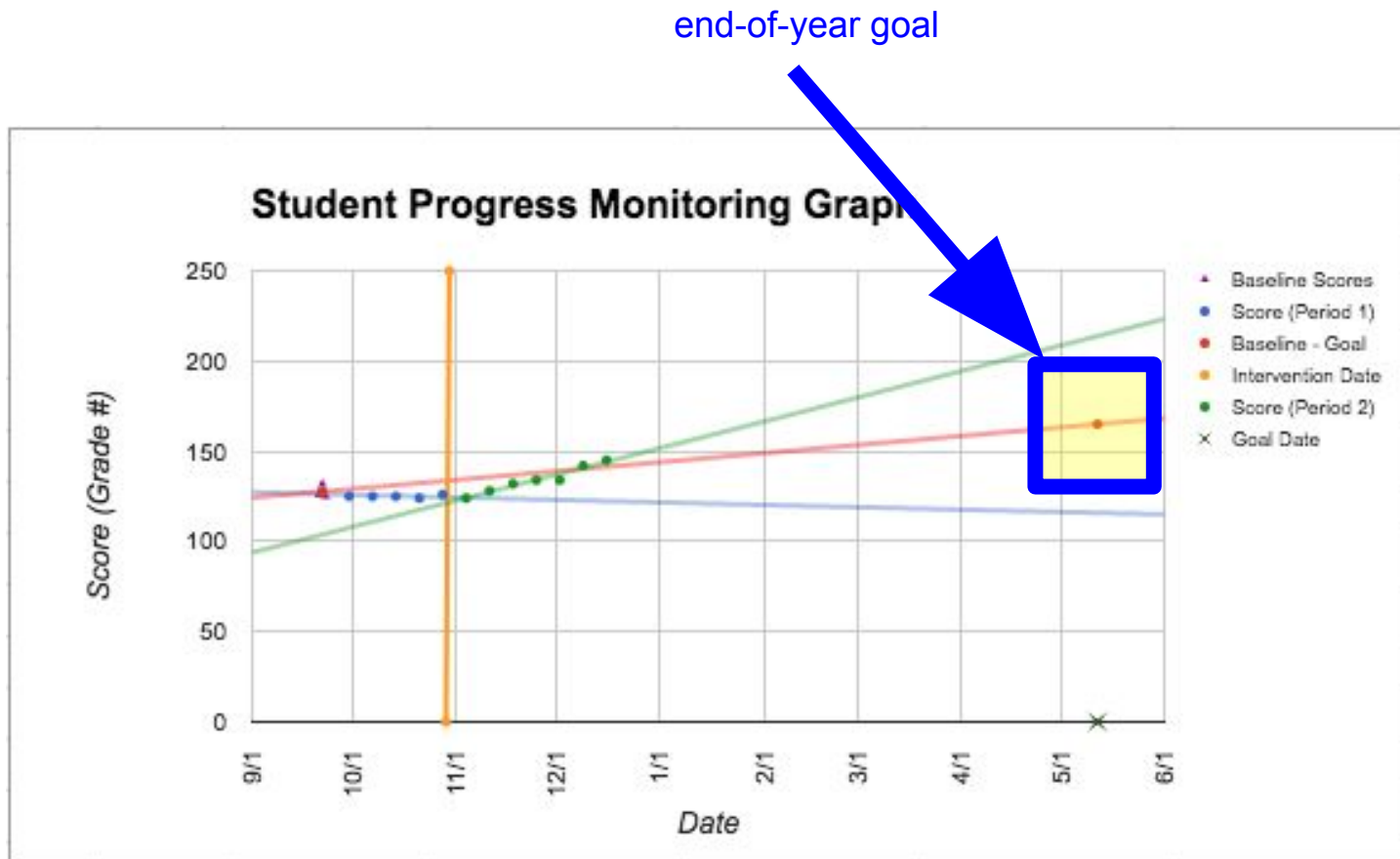
- goal line or aim line
- trend line
- intervention line
- horizontal line

Standard: S.6.B Explanation



# Tutorial

The student's **end-of-year goal** score is plotted, which represents the student's desired end-of-year score. The desired score may be based on the student's grade-level end-of-year benchmark, the national norm weekly rate of improvement, or the student's probe scores.





# Tutorial

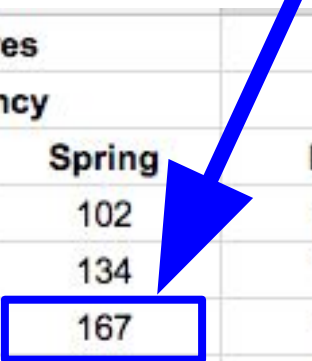
Three common methods exist for calculating an end of year goal score.

- The first method is based on identifying the grade level end of year benchmark score in a norm table. A **benchmark score** is a pre-determined level of performance on a test that is considered representative of proficiency or mastery of a certain set of skills. (Note: This is the method most frequently used at Great Plains.)
- The second method is based on the **national norm weekly rate of improvement**. Norms are standards of test performance derived by administering the test to a large representative sample of students. Individual student results are compared to the established norms. Rate of improvement represents the slope of improvement or average weekly increase, based on a line of best fit through the student's scores.
- The third method is based on an **intraindividual framework**. The intraindividual framework goal setting method using a student's baseline score, weekly rate of improvement representing at least eight CBM data points, and the number of weeks until the end of year goal date.

# Tutorial

At Great Plains, we typically establish a student's end-of-year goal score based on the end-of-year benchmark method. A *benchmark* is a pre-determined level of performance on a screening test that is considered representative of proficiency or mastery of a certain set of skills. We define an end-of-year benchmark as the end-of-year score that represents the 50th percentile based on the assessment vendor's norm study. According to values in the table, if your student's end-of-year goal in Oral Reading Fluency is established using the benchmark method, your student's goal would be set at 167.

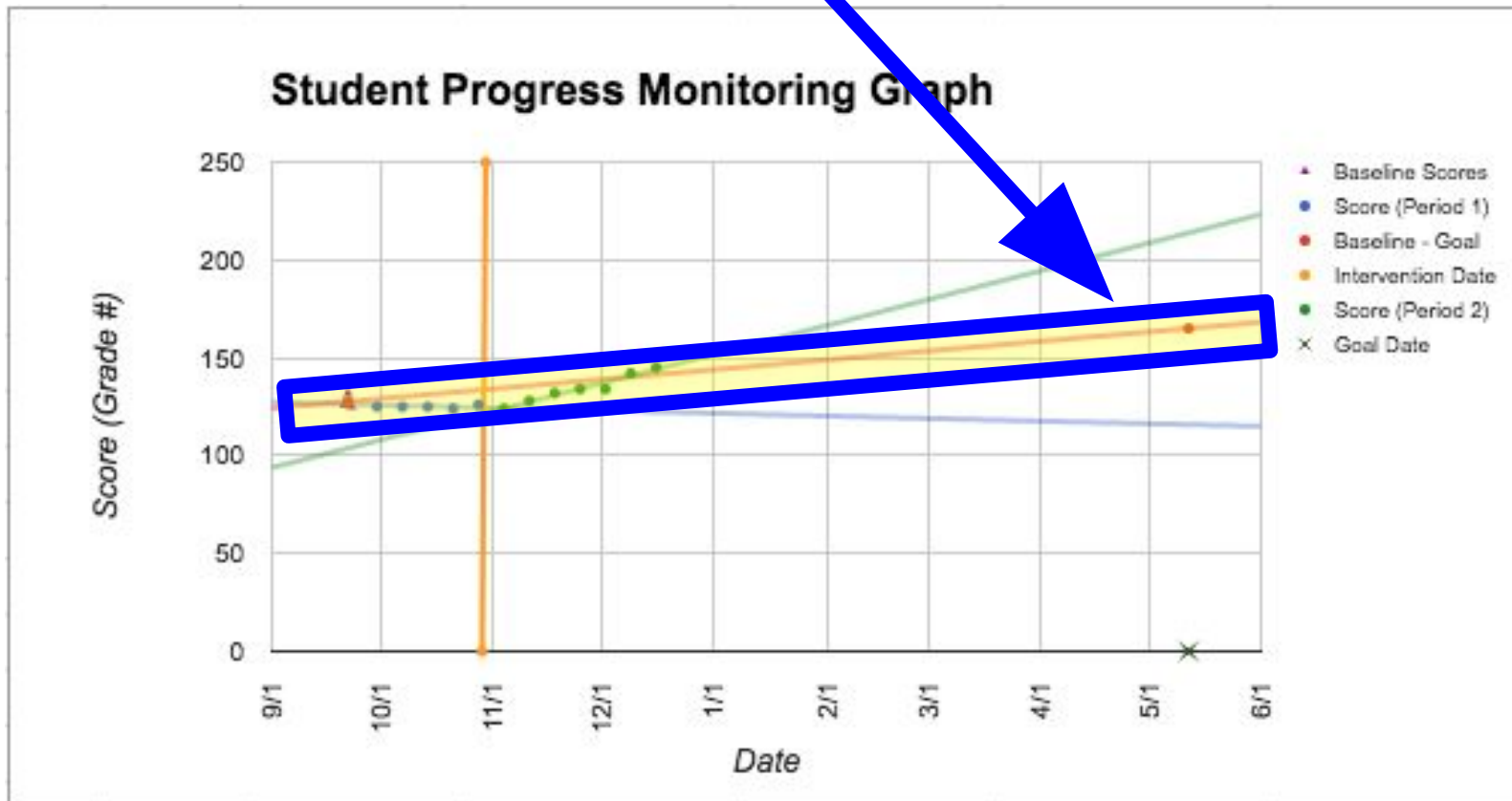
Grade # Reading General Outcome Measures						
Percentile	Oral Reading Fluency			Reading Comprehension		
	Fall	Winter	Spring	Fall	Winter	Spring
10th	94	96	102	11	11	11
25th	116	130	134	15	13	14
50th	141	158	167	17	16	17
75th	166	185	200	19	18	19
90th	191	211	224	20	19	20



# Tutorial

An **aim line** (otherwise known as a goal line) is drawn for the student, which is a line connecting the baseline score with the end-of-year goal score to represent the progress a student is expected to make in order to achieve the goal.

aim line (goal line)

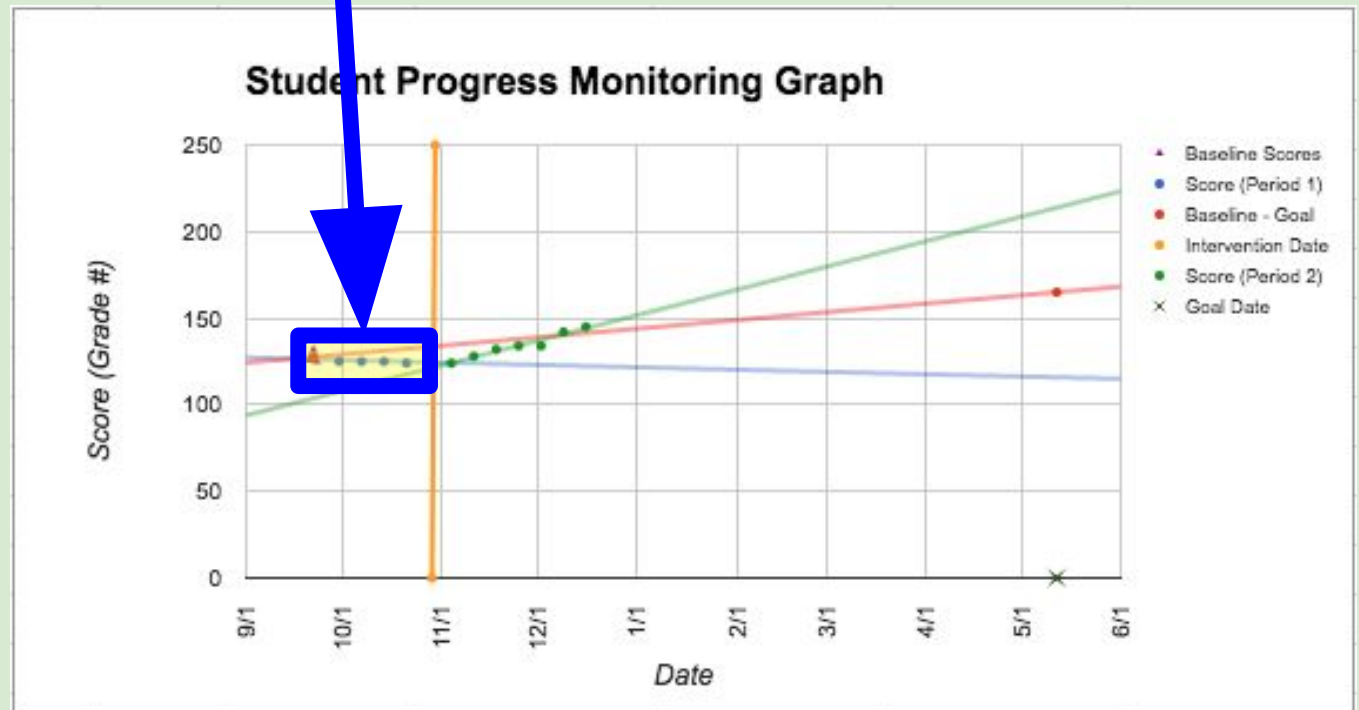


# Activity - 08.02.05

There are \_\_\_\_\_ that depict your student's pre-intervention scores. Each of these represents your student's performance at one point in time.

- data points
- goals
- interventions
- levels

Standard: S.6.B  
Explanation

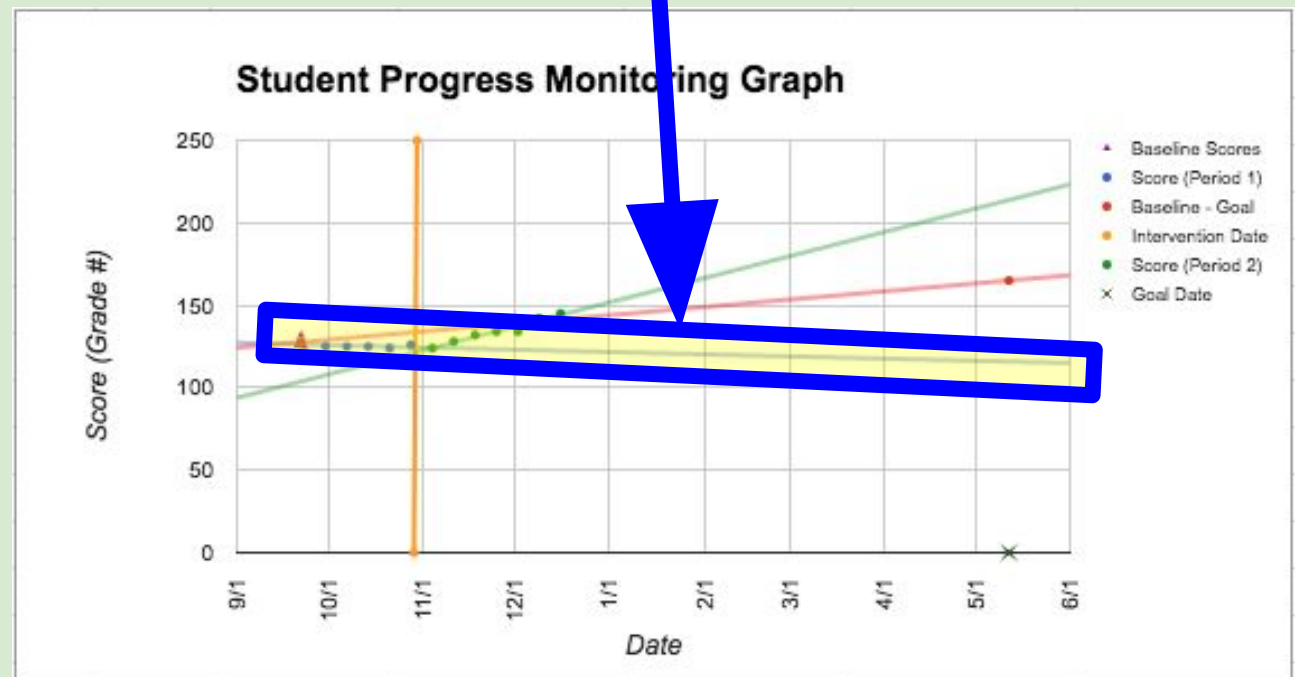


# Activity - 08.02.06

There is a(n) \_\_\_\_\_ that represents your student's pre-intervention scores. This type of line represents the line of best fit drawn through a series of data points.

- trend line
- vertical line
- intervention line
- goal line or aim line

Standard: S.6.B  
Explanation

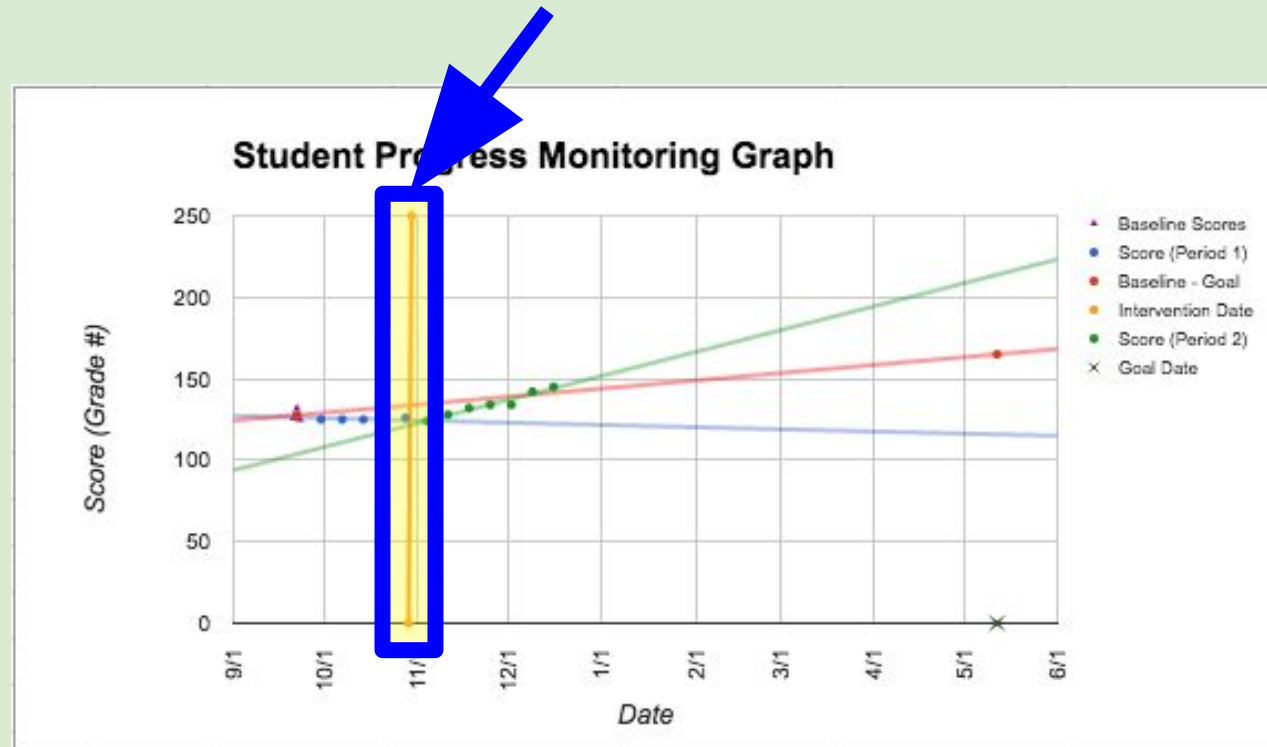


# Activity - 08.02.07

There is a(n) \_\_\_\_\_ that represents the start date of your student's evidence-based intervention.

- trend line
- vertical line
- intervention line
- goal line or aim line

Standard: S.6.B  
Explanation



# Activity - 08.02.08

An evidence-based intervention for your student is an intervention \_\_\_\_\_.

- for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the improvement of student learning beyond what is expected without that intervention
- based on parent opinions of various teacher-developed strategies they think will work well with their students
- that a teacher designs for an individual student based on anecdotal data representing the teacher's perceptions of classroom activity effectiveness
- that a colleague developed but never tested to measure the extent to which it worked

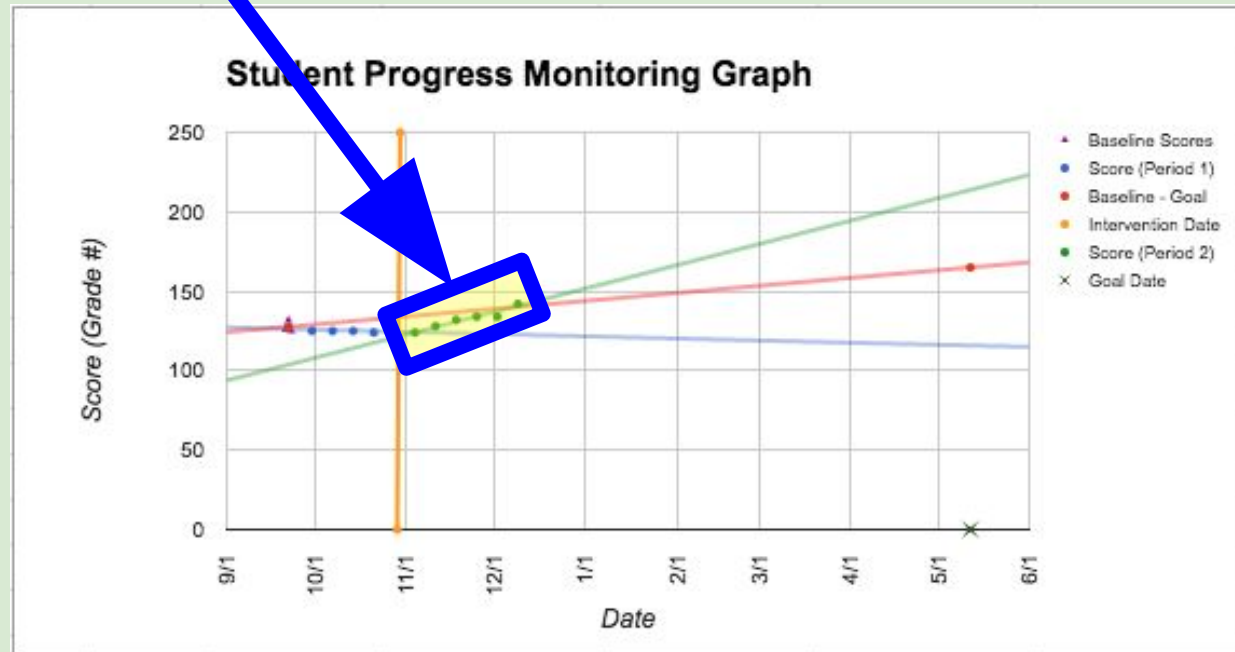
Standard: S.7.A Strategies

# Activity - 08.02.09

There are \_\_\_\_\_ representing a student's scores during an intervention.

- data points
- goals
- interventions
- levels

Standard: S.6.B Explanation



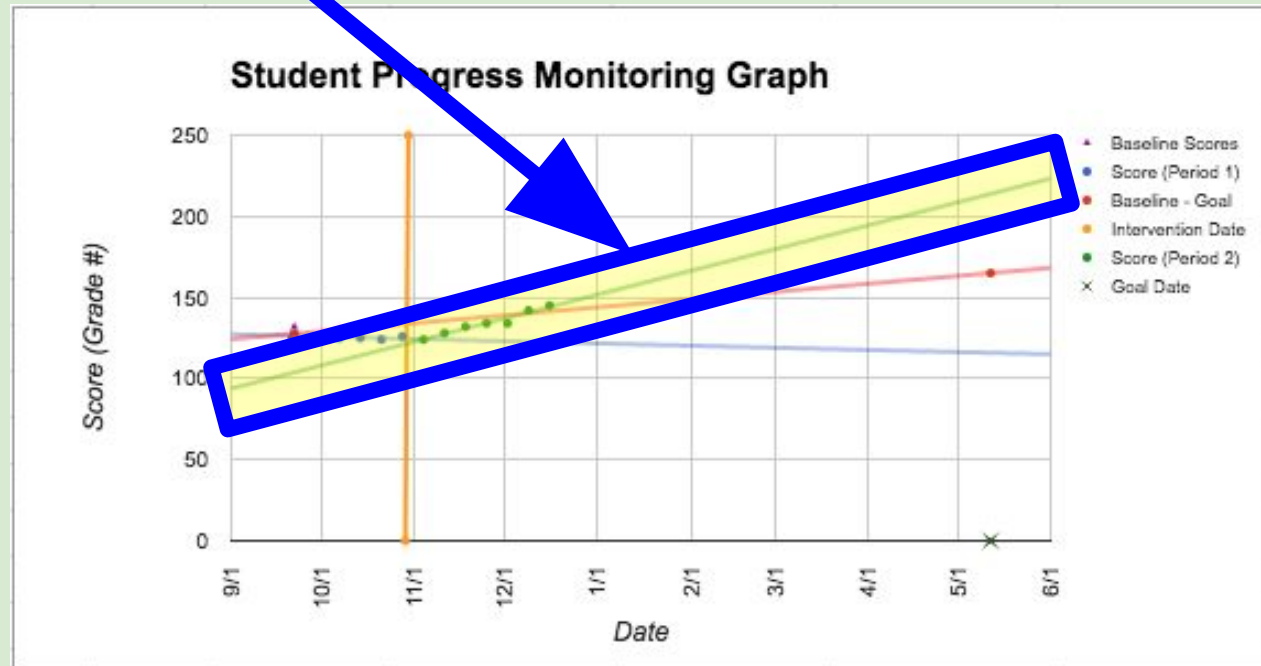


# Activity - 08.02.10

There is a(n) \_\_\_\_\_ that represents your student's scores during an intervention.

- trend line
- vertical line
- intervention line
- goal line or aim line

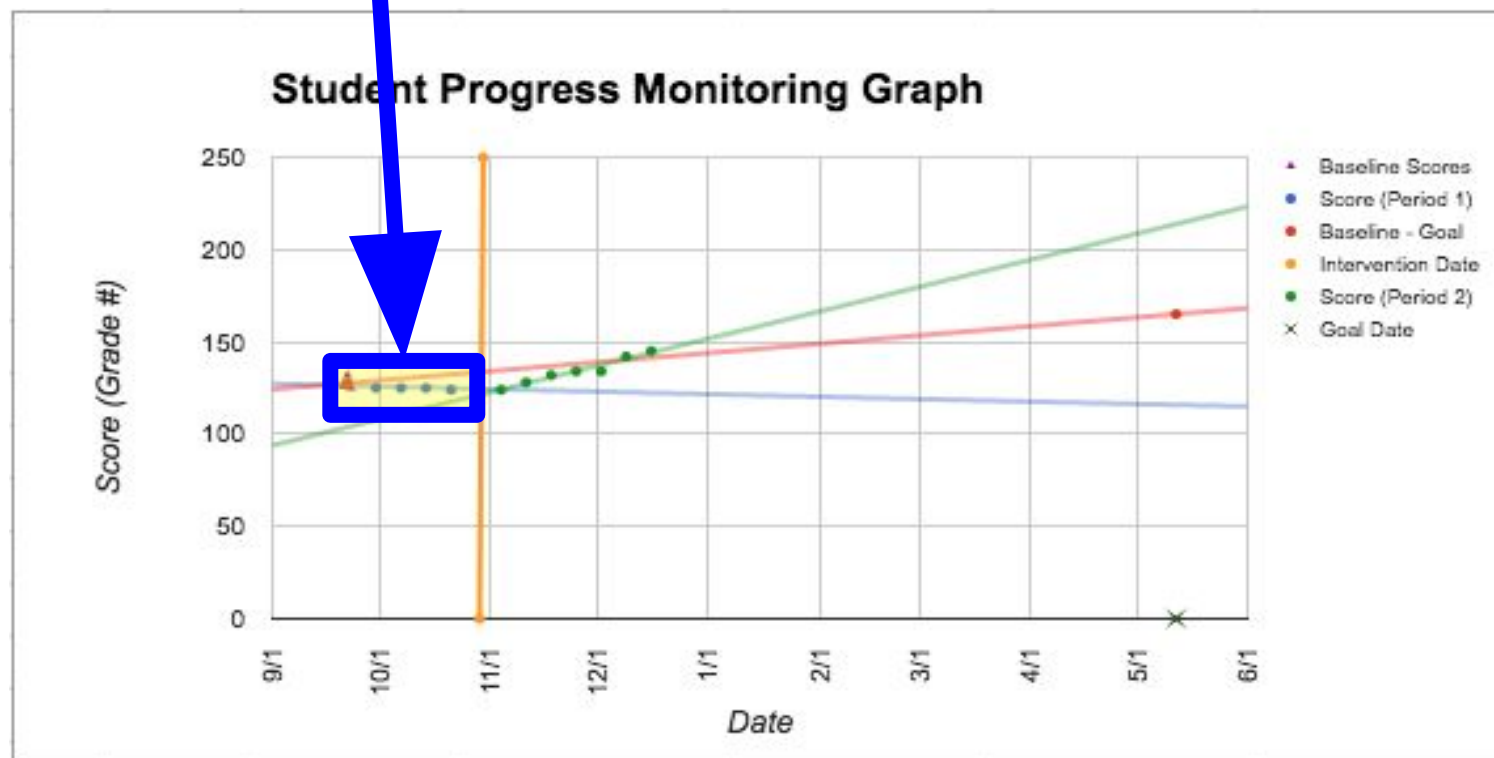
Standard: S.6.B Explanation



# Tutorial

There are **data points** that depict your student's pre-intervention scores. Each of these represents your student's performance at one point in time.

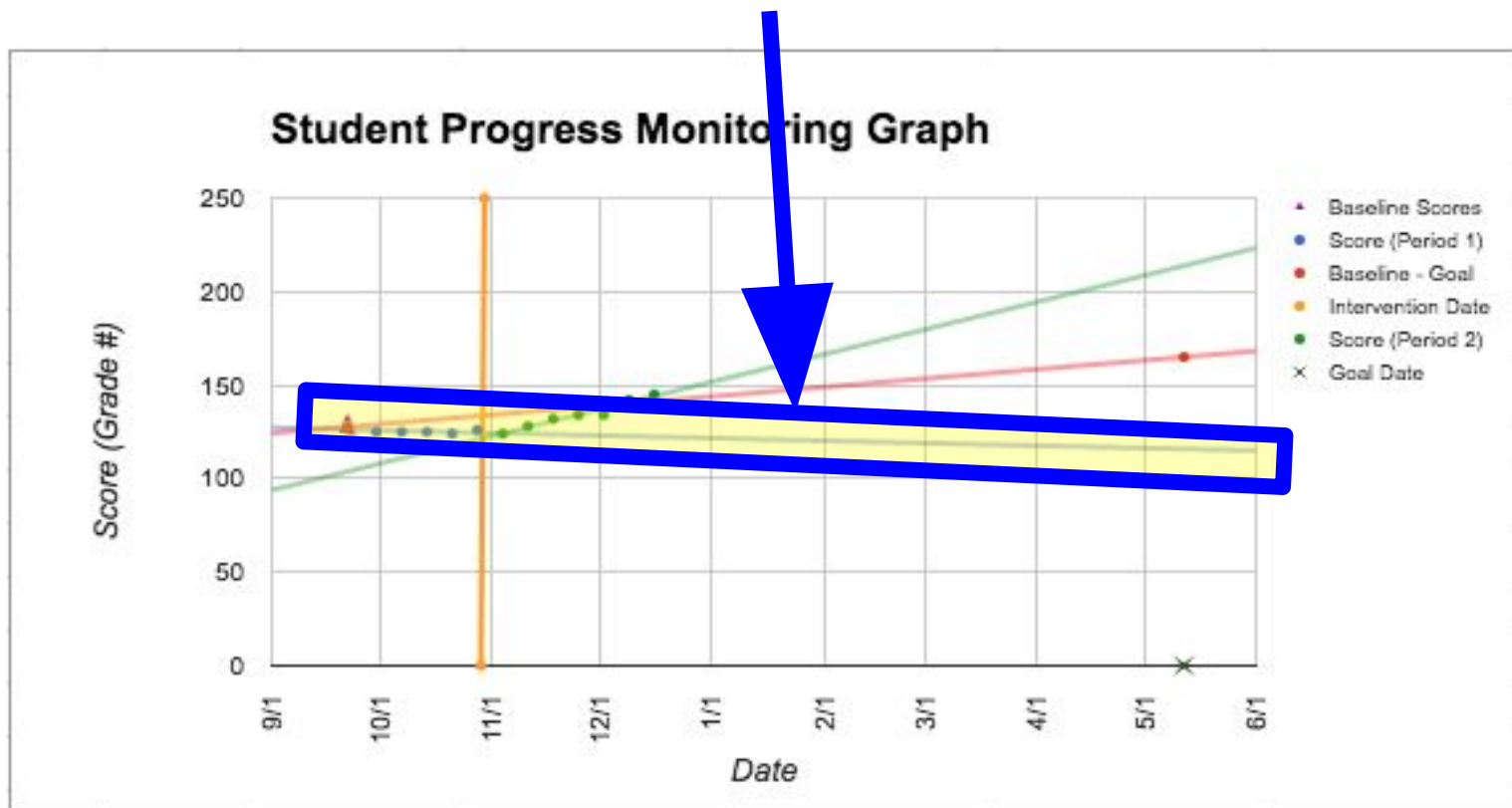
pre-intervention data points



# Tutorial

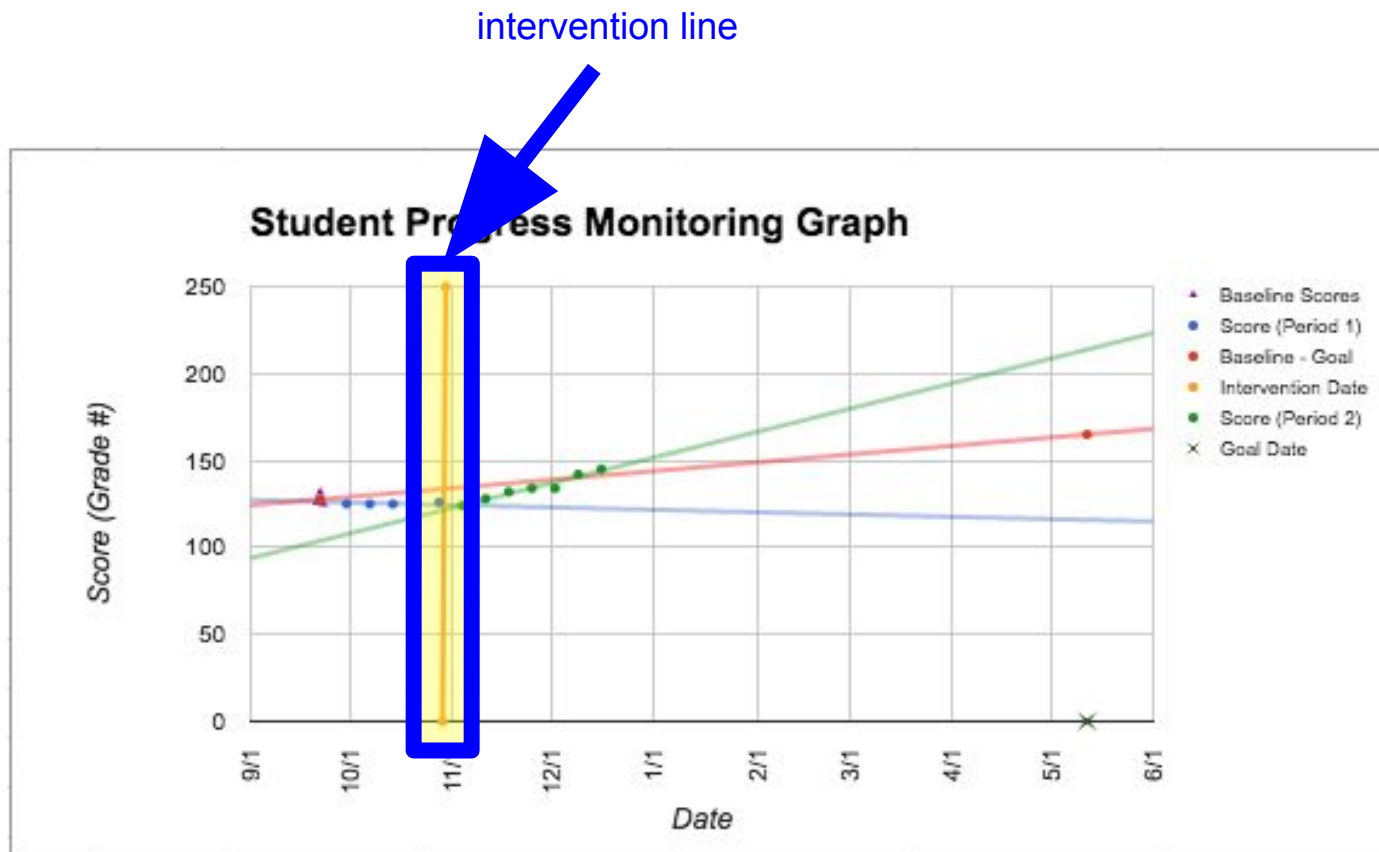
There is a **trend line** that represents your student's pre-intervention scores. This type of line represents the line of best fit drawn through a series of data points.

pre-intervention trend line



# Tutorial

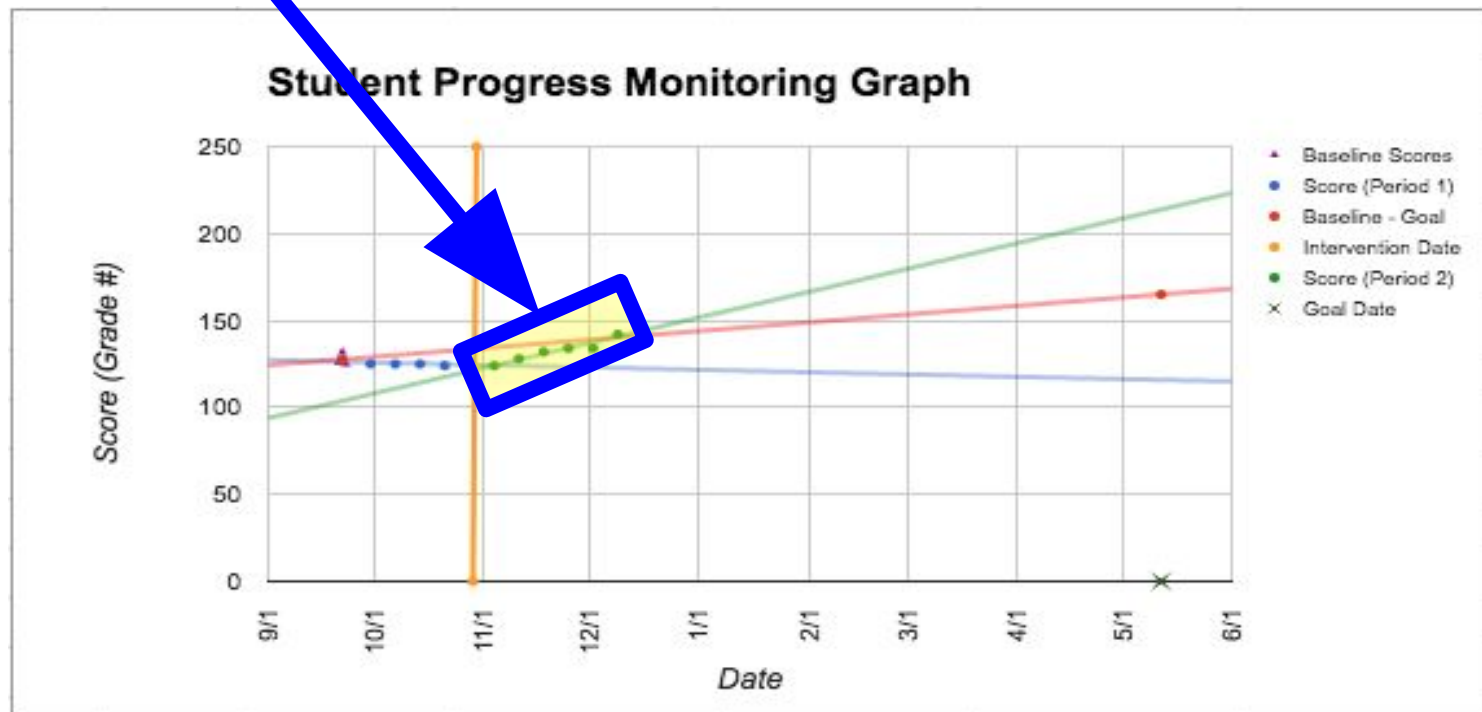
There's an **intervention line** representing the start date of a student's evidence-based intervention. An evidence-based intervention is an intervention for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the improvement of student learning beyond what is expected without that intervention.



# Tutorial

There are *data points* representing a student's scores during an intervention.

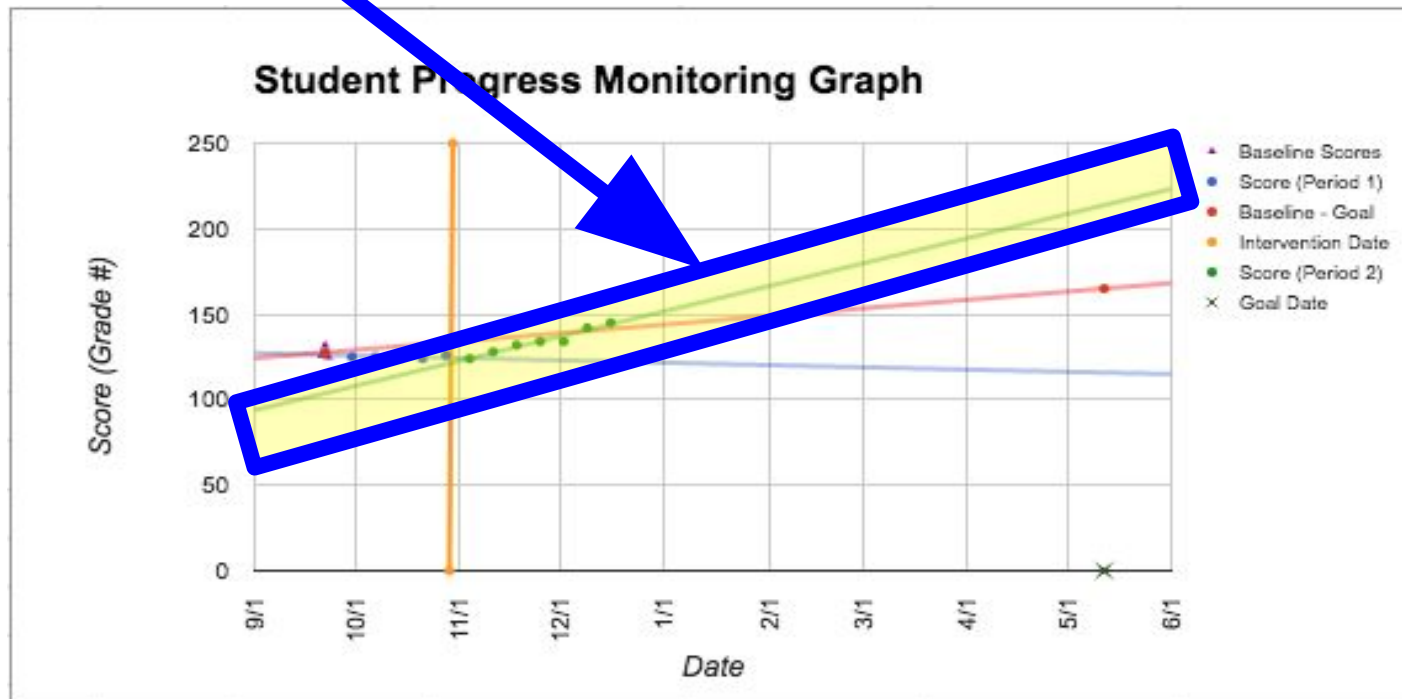
data points during intervention



# Tutorial

There is a *trend line* that represents your student's scores during an intervention.

trend line during intervention

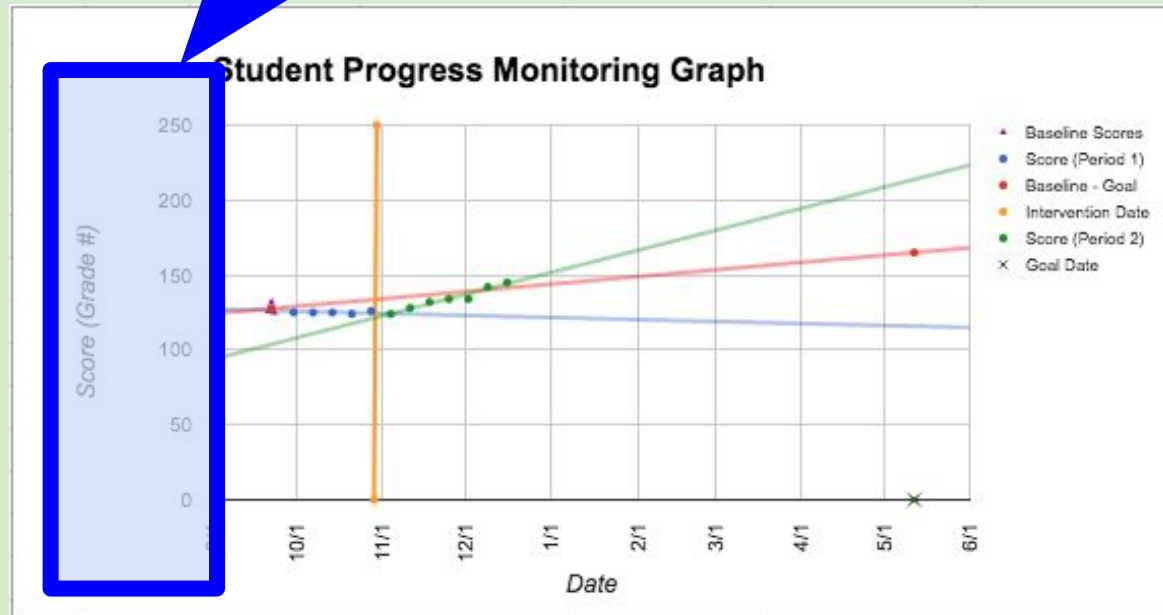


# Activity - 08.02.11

There are five unique data cycles that make up a complete progress monitoring process. Cycle 1, which focuses on \_\_\_\_\_, is required to establish the y-axis.

- selecting your student's appropriate grade level probe
- computing your student's baseline performance
- computing your student's end-of-year goal
- evaluating your student's at-risk status

Standard: K.2.D  
Data Context

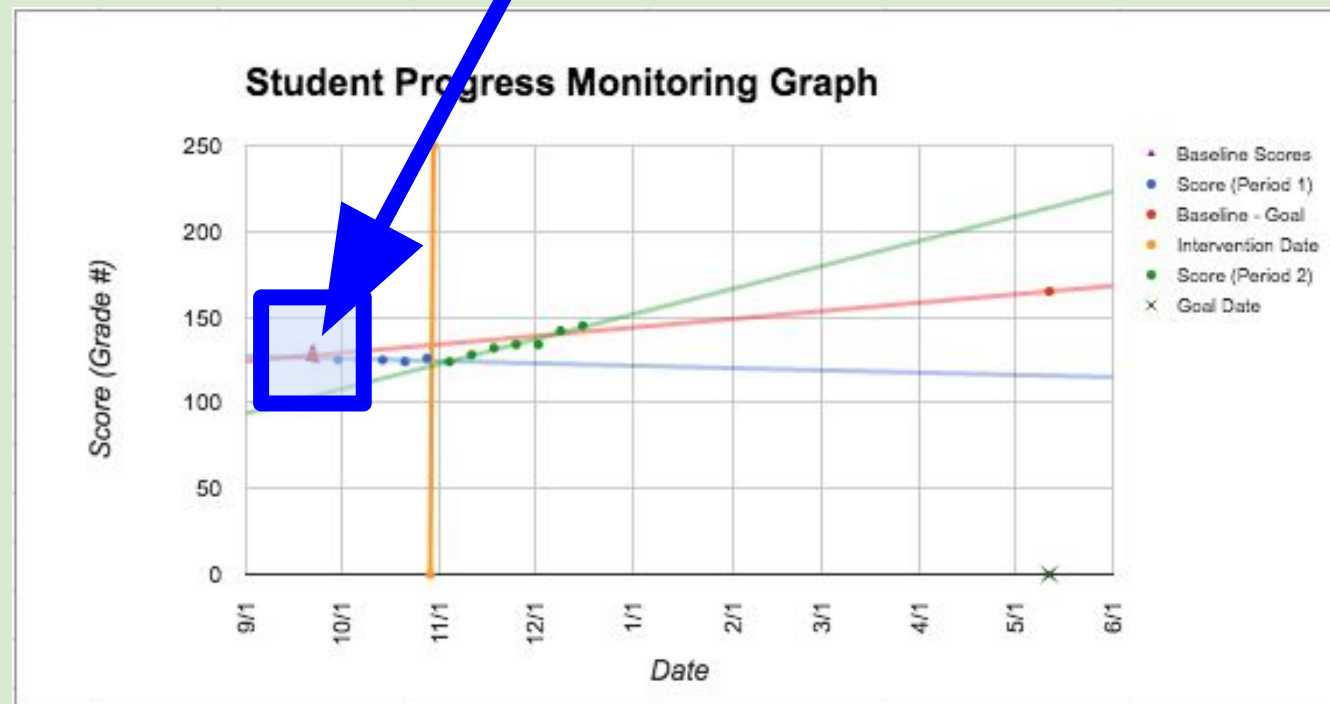


# Activity - 08.02.12

Cycle 2, which focuses on \_\_\_\_\_, is required to plot your student's baseline score

- selecting your student's appropriate grade level probe.
- computing your student's baseline performance
- computing your student's end-of-year goal
- evaluating your student's at-risk status

Standard: K.2.D  
Data Context



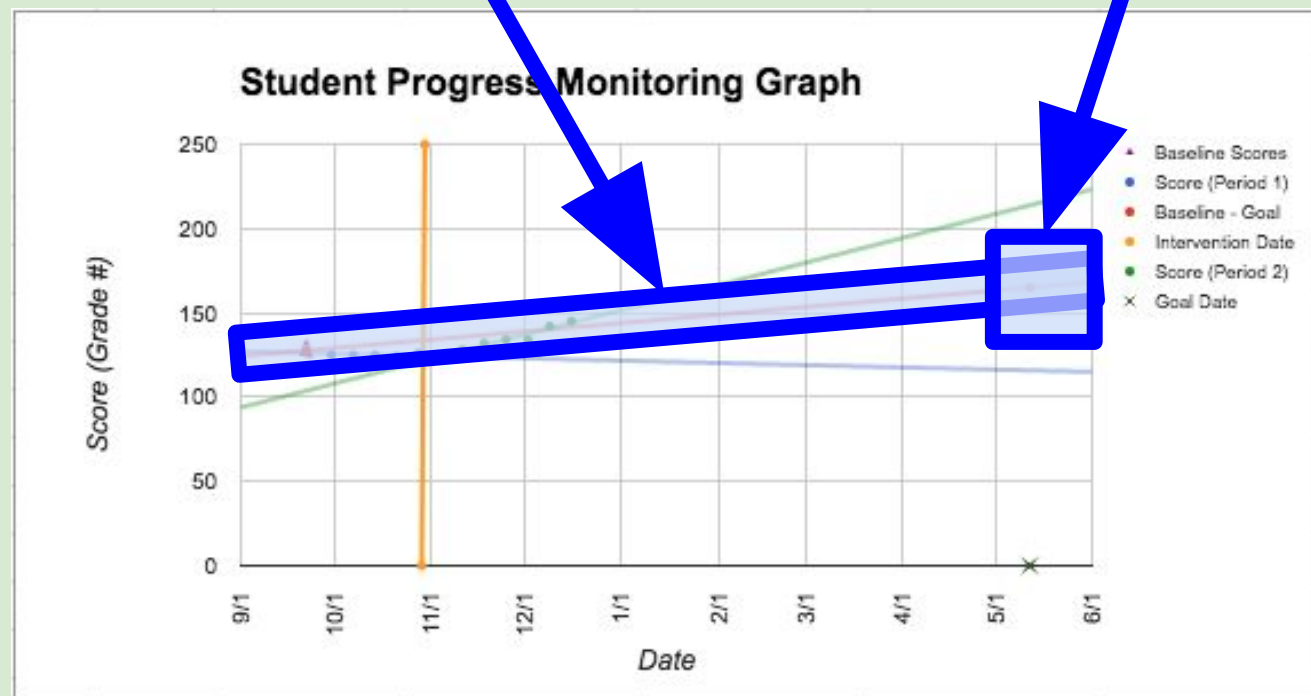


# Activity - 08.02.13

Cycle 3, which focuses on \_\_\_\_\_, is required to plot your student's end-of-year goal and draw the goal line.

- selecting your student's appropriate grade level probe
- computing your student's baseline performance
- computing your student's end-of-year goal
- evaluating your student's at-risk status

Standard: K.2.D  
Data Context

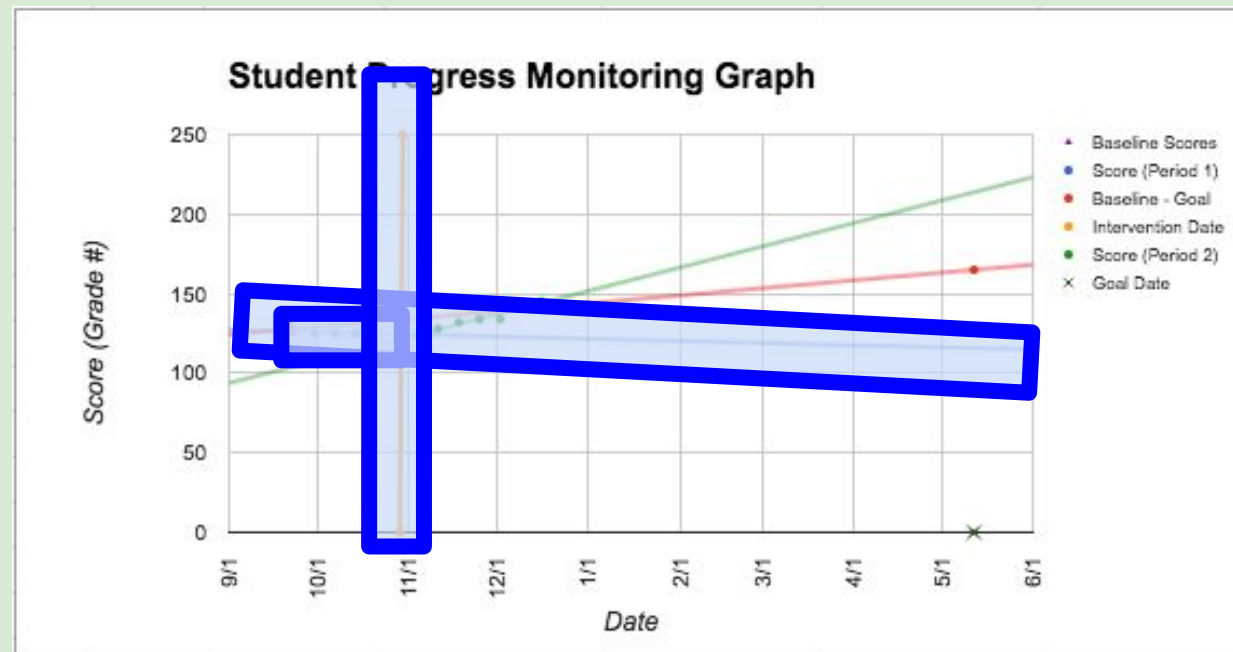


# Activity - 08.02.14

Cycle 4, which focuses on \_\_\_\_\_, is required to plot your student's pre-intervention data points, draw the pre-intervention trend line, and draw the intervention line.

- selecting your student's appropriate grade level probe
- computing your student's baseline performance
- computing your student's end-of-year goal
- evaluating your student's at-risk status

Standard: K.2.D  
Data Context

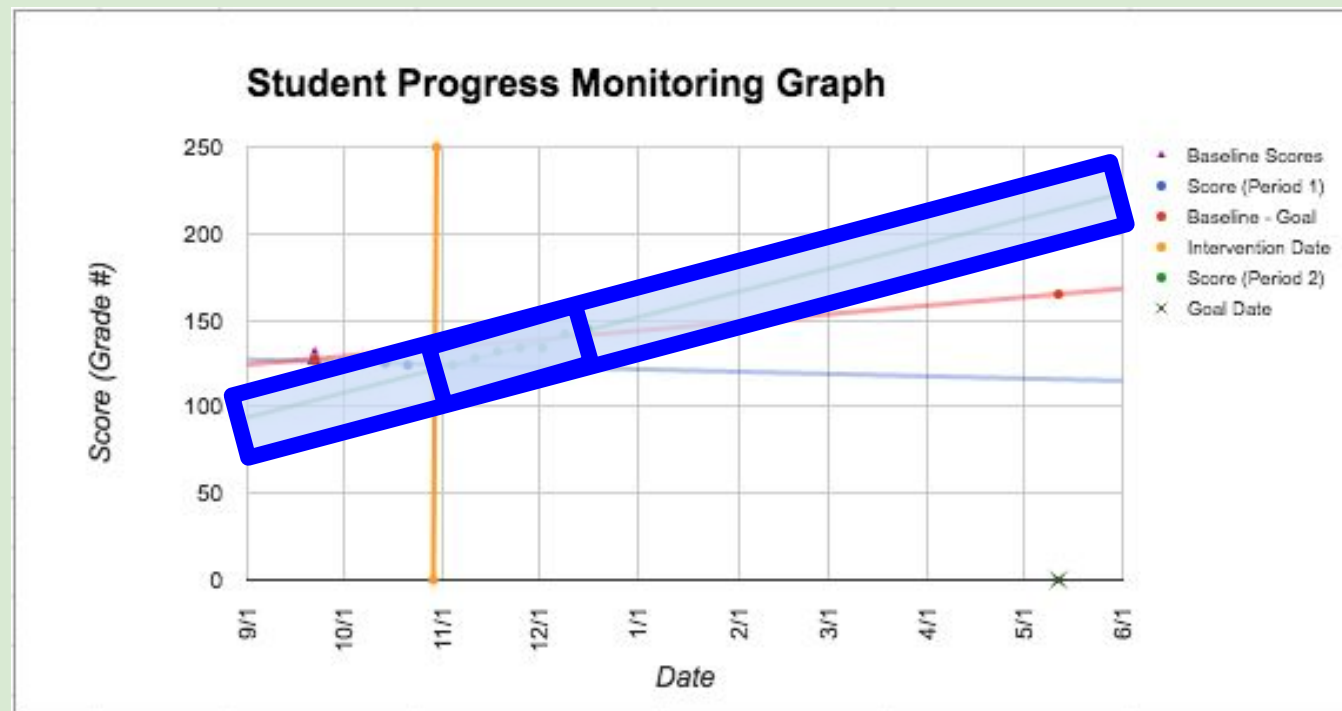


# Activity - 08.02.15

Cycle 5, which focuses on \_\_\_\_\_, is required to plot your student's data points and draw the trend line during the intervention.

- selecting your student's appropriate grade level probe
- computing your student's baseline performance
- computing your student's end-of-year goal
- evaluating the impact of the intervention on your student

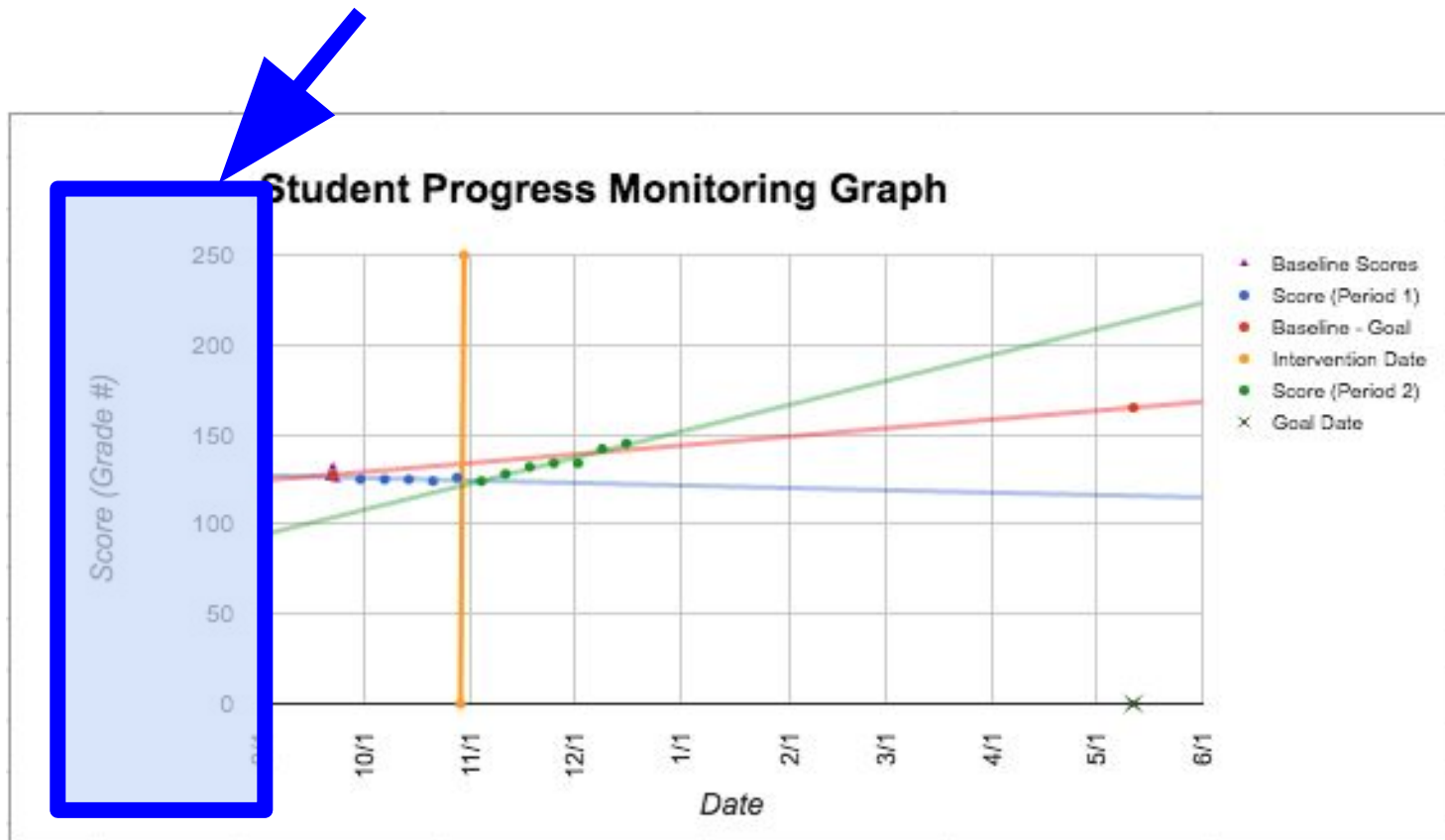
Standard: K.2.D  
Data Context



# Tutorial

There are **five unique data cycles** that make up a complete progress monitoring process. Cycle 1, which focuses on selecting your student's appropriate grade level probe, is required to establish the y-axis.

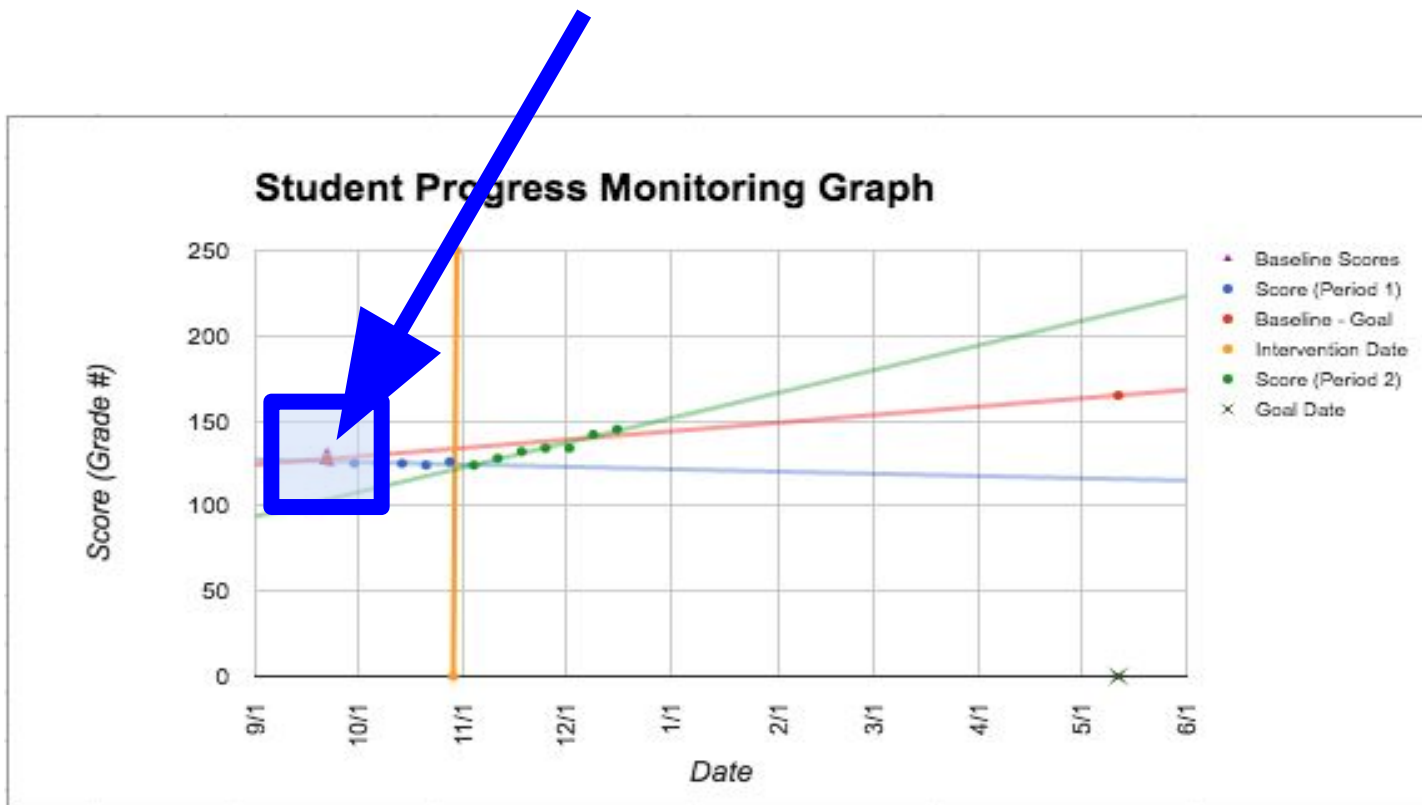
Link to Progress Monitoring Data Cycles PDF: <https://goo.gl/ezfSHL>



# Tutorial

Cycle 2, which focuses on computing your student's baseline performance, is required to plot your student's baseline score.

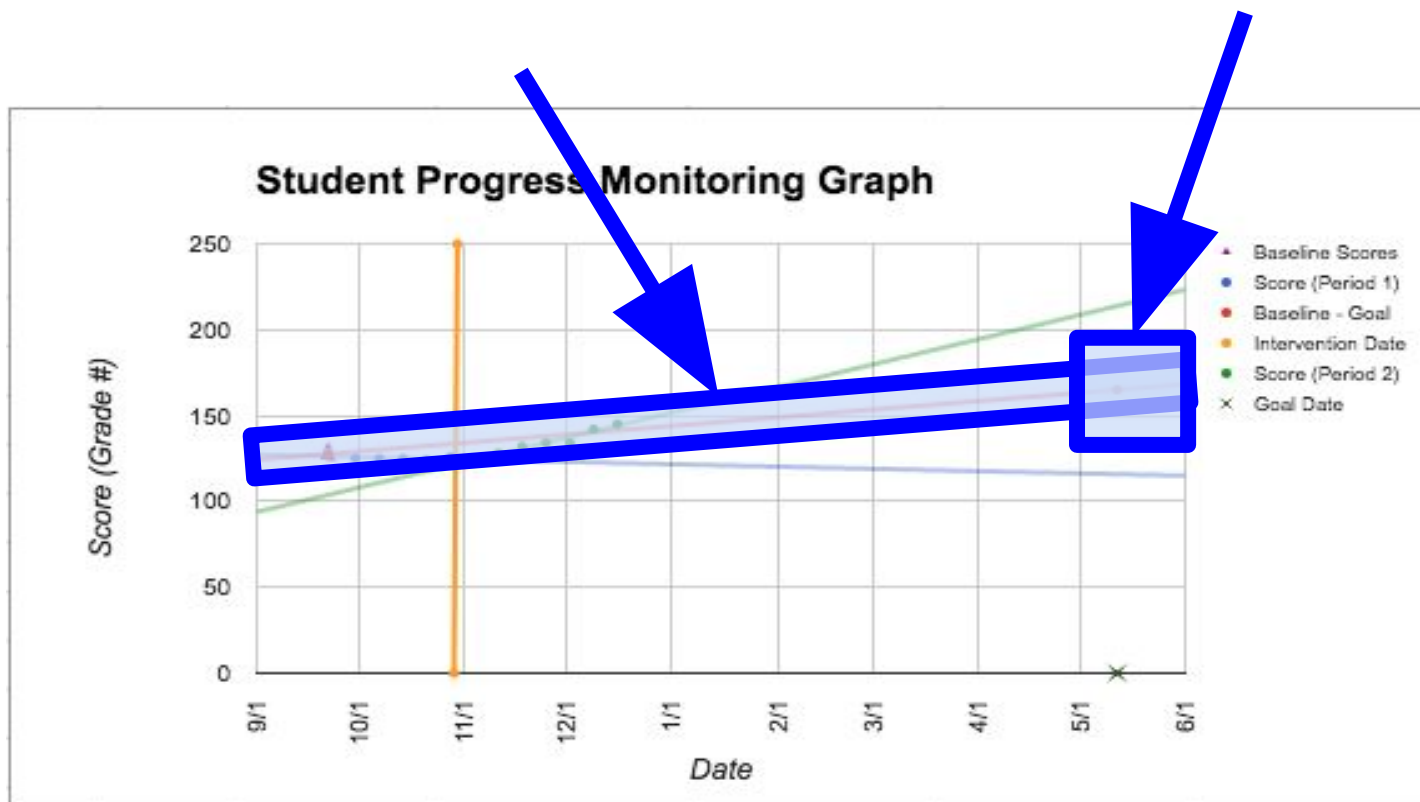
Link to Progress Monitoring Data Cycles PDF: <https://goo.gl/ezfSHL>



# Tutorial

Cycle 3, which focuses on computing your student's end-of-year goal, is required to plot your student's end-of-year goal and draw the goal line.

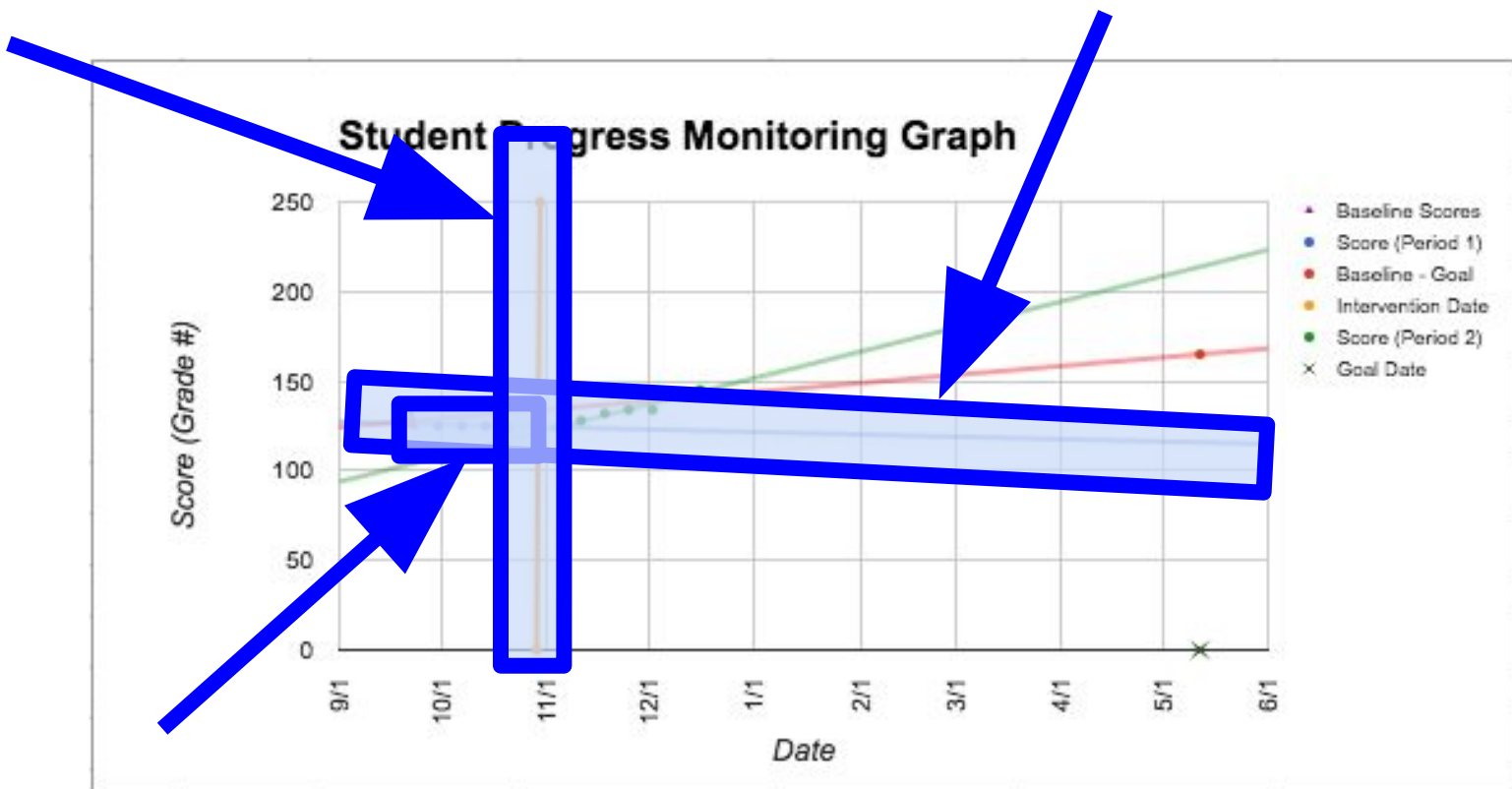
Link to Progress Monitoring Data Cycles PDF: <https://goo.gl/ezfSHL>



# Tutorial

Cycle 4, which focuses on evaluating your student's at-risk status, is required to plot your student's pre-intervention data points, draw the pre-intervention trend line, and draw the intervention line.

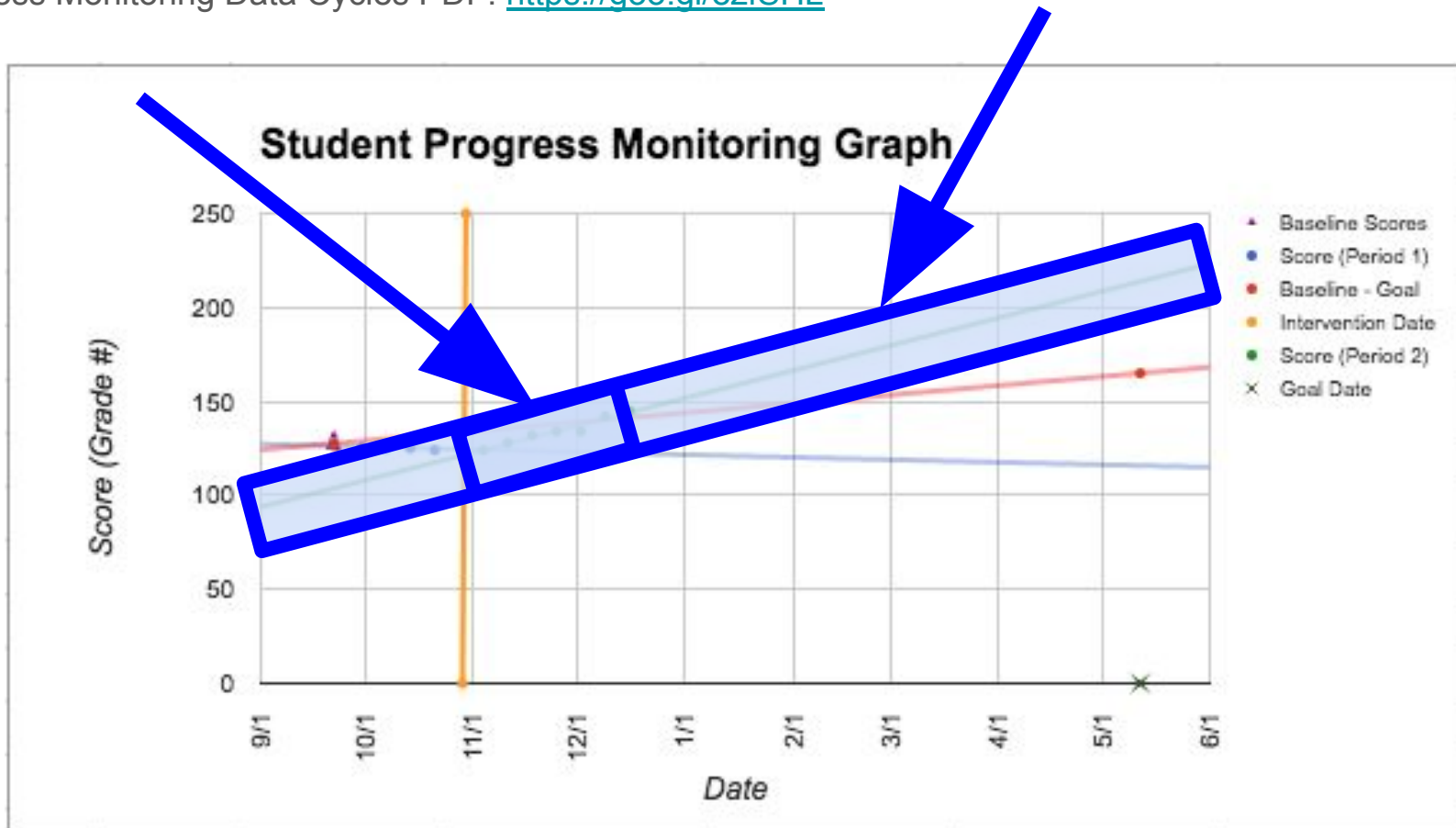
Link to Progress Monitoring Data Cycles PDF: <https://goo.gl/ezfSHL>



# Tutorial

Cycle 5, which focuses on evaluating the impact of the intervention on your student, is required to plot your student's data points and draw the trend line during the intervention.

Link to Progress Monitoring Data Cycles PDF: <https://goo.gl/ezfSHL>





# Conclusion

**Ryan:**

Awesome work on filling in the information for your flyer relevant to progress monitoring in our district. Here is a finished and polished version for you to keep in your data binder, along with the progress monitoring data cycles, to reference as we get going on progress monitoring our potentially at-risk students identified through universal screening. Our data binders are going to be our best friends this year as we truly start to apply our evidence based decisions to positively impact students. Please remember to *bring your binder with you* to all of our PLC meetings as well as our Data Team meetings. Have a great rest of your day!

Progress monitoring complete flyer: <https://goo.gl/XRfeMN>

Progress monitoring data cycles: <https://goo.gl/ezfSHL>

# Activity Answers

08.02.01	end-of-year goal score
08.02.02	benchmark
08.02.03	167
08.02.04	goal line or aim line
08.02.05	data points
08.02.06	trend line
08.02.07	intervention line
08.02.08	for which data from scientific, rigorous research studies have demonstrated (or empirically validated) the improvement of student learning beyond what is expected without that intervention
08.02.09	trend line
08.02.10	selecting your student's appropriate grade level probe
08.02.11	computing your student's baseline performance
08.02.12	computing your student's end-of-year goal
08.02.13	evaluating your student's at-risk status
08.02.14	computing your student's end-of-year goal

# Indicate the extent to which you agree or disagree

	Strongly disagree	Disagree	Agree	Strongly Agree
This module part increased my knowledge of key elements on a progress monitoring graph				
This module part increased my knowledge of 5 unique data cycles relevant to progress monitoring				

# Well Done

You have completed this module part. You can begin the next lesson when you are ready.