

CLASSROOM DATA
Math and English/Language Arts

Grades: K-3

PAGE 1

Acceleration Approach

Standard has been accelerated by moving grade level K3 up to the standard used for grade level 5.

K	1	2	3	4	5	6	7	8	9	CIM	CRLS/ CAM yes
			→								
				→							

Organizing Overarching Concept (e.g., systems, patterns of change, models, scales)

Systems

Organizing Higher Order Skills (e.g., Bloom’s, Paul’s Model of Reasoning)

Paul’s model of Reasoning

Differentiation Features - Students:

- Clustered by higher order thinking
- Used multiple higher-level skills
- Added more variables to study
- Required multiple resources
- Student conducts original research
- Student develops a product

COMMON CURRICULUM GOAL

Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

English/ Language Arts-Reading

Read a wide variety of literature of varying complexity that enhances other subjects.

Use the structural features of text to increase comprehension of a variety of informational printed and electronic text.

English/ Language Arts-Writing

Communicate supported ideas using oral, visual, written, and multi-media forms in ways appropriate to topic, context, audience, and purpose.

GRADE LEVEL STANDARDS

Math-Statistics and Probability

2nd Grade - Ask and answer simple questions related to tallies, charts, and bar graphs.

8th Grade - Collect and display data lists, tables, and plots using appropriate technology (e.g., graphing calculators, computer software).

English/ Language Arts-Reading

3rd Grade - Students listen and respond; and read and respond to a wide variety of significant works of children’s literature.

3rd Grade – Use simple graphs, charts, tables and diagrams to find information.

English/ Language Arts-Writing

3rd Grade – Clarify and enhance oral presentations through the use of appropriate props (e.g., objects, pictures, charts.)

CLASSROOM DATA

Math and English/Language Arts

Grades: K-3

PAGE 2

Archetypal Model

All students will formulate and answer questions relating to information presented from tallies, charts and TAG students will work with bar graphs. All students will collect and record data from surveys taken in the classroom.

The students will collect and record data from observations and surveys in the school/classroom environment to be used in group discussion, and interpret the data presented in the form of tallies, charts, or graphs. TAG students will collect and display data using appropriate technology.

TASK DEMAND

Sample Task Activity

- Students will conduct a survey of students in their grade level of their favorite subject, as delineated. Choice includes reading, math, spelling and science. (See Graphic Organizer *Student Survey Data Form: Choice of Topic.*)
- Students will then make charts showing their results i.e. tallies and bar graphs.
- Students will compile results in visual form. They will make a display using appropriate technology and communicate the information on the display.
- Students will read and interpret two-way tables.
- Students will respond the classmates' questions.

- Read ***Tiger Math*** in whole class.
 - The students may use *hyperstudio* or other technological resources to communicate supported ideas using visual and media forms.

- **Extension Project**
 - Students gather information relating to amount of lunches sold on days where most favorite meals are served, amount of products from school store, etc.
 - Students present information in graphs, table, chart form.
 - Students make comparisons, predictions, draw conclusions from collected data.

CLASSROOM DATA

Math and English/Language Arts

Grades: K-3

PAGE 3

Survey Options (See *Student Survey Data Form* Graphic Organizer.)

- How many classmates have blue/brown/green/other colored eyes? (Use *Student Survey Data Form: Color of Eyes* Graphic Organizer.)
- Which classmates have pets and what kind of pet?
- Which lunch meals (choice of five) are your favorites?

Questions

- Ask/answer questions, record results, design a survey design a display.
- How would you explain your results to a student who does not understand?
- How would you explain it in another way?
- What do you understand now that you did not before?

Implementation Time

- Three – four 45-minute class periods for preparation. 1 day for presentations.

Resources

Burns, M. (1993). *About teaching mathematics*. New York: Addison Wesley Longman, Inc.

The Consumer's Guide to Mathematics for Gifted Students. Williamsburg, VA: Center for Gifted Education William and Mary.

Visual Math Lesson 33, The Math Learning Center. Portland, OR.

Nagda, A., & Bickel, C. (2001). *Tiger Math: Learning to Graph from a Baby Tiger*. School & Library Binding.

Scoring Guide	6 Exemplary	5 Proficient	4 Strong	3 Developing	2 Emerging	1 Beginning
Students will be able to:						
Define a problem that lent itself to data collection.						
Accurately collect and record data						
Display data in tally and bar graph form						
Present and answer simple questions related to data collection, tallies, and graphs.						
Transfer data using appropriate technology (graphing, calculators, software)						

The editor used the internet for many resources listed in this document. The listed books and internet sites should be reviewed and evaluated by the teacher before using.

GRAPHIC ORGANIZER
STUDENT SURVEY DATA TABLE FORMAT

Grades: K-3

PAGE 4

Name _____ Date _____

Classmates in _____ grade classroom. Teacher _____

**CHOICE OF
TOPIC**

NAME	READING	MATH	SPELLING	SCIENCE
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

GRAPHIC ORGANIZER
STUDENT SURVEY DATA TABLE FORMAT

Grades: K-3

PAGE 5

Name _____ Date _____

Classmates in _____ grade classroom. Teacher _____

COLOR OF EYES

	NAME	BLUE	BROWN	GREEN	OTHER
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

GRAPHIC ORGANIZER
STUDENT SURVEY DATA TABLE WORKSHEET

Grades: K-3

PAGE 6

Name _____ Date _____

TOPIC:

Classmates in _____ grade classroom. Teacher _____

NAME				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

CLASSROOM DATA
Math and English/Language Arts

Grades: K-3

PAGE 7

TAG NEEDS ADDRESSED

INTELLECTUALLY GIFTED	ACADEMICALLY TALENTED ENG/LA	ACADEMICALLY TALENTED MATH	CAREER RELATED LEARNING STANDARDS FOR CAM - Certificate of Advanced Mastery	TEACHER CHECKS THE BENCHMARK LEVEL STUDENT IS PURSUING
<input type="checkbox"/> Advanced Critical Reasoning <input type="checkbox"/> Scholarly Interaction <input checked="" type="checkbox"/> Continuous Progress for Level and Rate* <input type="checkbox"/> Challenging Resources <input type="checkbox"/> Effecting Change <input type="checkbox"/> Decision Making; Ethical Use of Influence <input type="checkbox"/> Leadership Training/Career <input type="checkbox"/> Realistic Goal Setting <input type="checkbox"/> Regular Interaction with Intellectual Peers <input type="checkbox"/> Social-Emotional Issues; Support; Coping Strategies <input type="checkbox"/> Advanced Academic Planning <input type="checkbox"/> Opportunity for Competition/Failures/Successes <input type="checkbox"/> Creative Problem Solving with Real Problems/Audience <input type="checkbox"/> Pursuit of Advanced Level Research <input type="checkbox"/> Advanced Vocabulary Development	<input type="checkbox"/> Advanced Critical Thinking in LA <input checked="" type="checkbox"/> Continuous Progress/Level and Rate* in LA <input type="checkbox"/> Challenging LA Resources <input type="checkbox"/> Creative Problem Solving Strategies in LA <input type="checkbox"/> Advanced Vocabulary Development <input type="checkbox"/> Leadership Training/Career <input type="checkbox"/> Decision Making; Ethical Use of Influence <input type="checkbox"/> Regular Interaction with Talented LA Peer <input type="checkbox"/> Realistic Goal Setting <input type="checkbox"/> Opportunity for Competition/Failures/Successes <input type="checkbox"/> Advanced Academic Planning in LA <p>* Rate requires monitoring to ensure that the student was allowed to move ahead upon acquiring concepts.</p>	<input type="checkbox"/> Advanced Critical Thinking in Math <input checked="" type="checkbox"/> Continuous Progress/Level and Rate* in Math <input type="checkbox"/> Challenging Math Resources <input type="checkbox"/> Creative Problem Solving Strategies in Math <input type="checkbox"/> Math Advanced Vocabulary Development <input type="checkbox"/> Leadership Training/Career <input type="checkbox"/> Decision Making; Ethical Use of Influence <input type="checkbox"/> Regular Interaction with Talented Math Peers <input type="checkbox"/> Realistic Goal Setting <input type="checkbox"/> Opportunity for Competition/Failures/Successes <input type="checkbox"/> Advanced Academic Planning in Math	<input checked="" type="checkbox"/> Personal Management <input checked="" type="checkbox"/> Problem Solving <input checked="" type="checkbox"/> Communication <input type="checkbox"/> Teamwork <input type="checkbox"/> Employment Foundations <input type="checkbox"/> Career Development	<p>English/LA:</p> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> CIM <input type="checkbox"/> CAM <p>Math:</p> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> CIM <input type="checkbox"/> CAM
<p>Student _____ Grade _____</p> <p>Teacher _____ School _____</p> <p>Date Initiated _____ Date Completed _____</p> <p>Check TAG Identification category: <input type="checkbox"/> Intellectual <input type="checkbox"/> Academic Math <input type="checkbox"/> Academic LA</p>				