

PROJECT OVERVIEW

Name of Project:		Get-Mart Consumer Reports				Duration: 4 Weeks, 1 st Quarter				
Subject/Course: Science		Teacher(s): E Frank			Grade Level: 7					
Other subject areas to be included, if any:		Math, Language Arts								
Project Idea Summary of the issue, challenge, investigation, scenario, or problem:		Get-Mart Memo- Students will choose a specific product to test three versions of that product, two name brands and one store brand. Get-Mart would like the students to test their store product against the name brand products so that they can create a new store-brand campaign.								
Driving Question		Which consumer products are most reliable?								
Content and Skills Standards to be addressed:		SPI 0707.Inq.1 Design a simple experimental procedure with an identified control and appropriate variables. SPI 0707.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment. SPI 0707.Inq.4 Draw a conclusion that established a cause and effect relationship supported by evidence. SPI 0707.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error.								
		T+A	E			T+A	E			
21st Century Skills to be explicitly <i>taught and assessed</i> (T+A) or that will be <i>encouraged</i> (E) by project work, but not taught or assessed:		Collaboration		X		Other:				
		<ul style="list-style-type: none"> • Design and Perform Experiment: Lab Report Template & Lab Report Rubric 				<ul style="list-style-type: none"> • Problem Solving- create a Lab Report Protocol to test product reliability 				
		Presentation		X		Project Management			X	
		<ul style="list-style-type: none"> • Power Point Explaining Experiment Results for "Get-Mart" Executives 				<ul style="list-style-type: none"> • Manage group and individual time and participation in project 				
		Critical Thinking:			X					
		<ul style="list-style-type: none"> • Design, Perform and Evaluate Experiment 								
							Presentation Audience:			
Culminating Products and Performances		Group:		<ul style="list-style-type: none"> • Research summary with Data Table • Written report of testing protocols and hypothesis • Oral presentation • Defense of test results 			Class:	X		
									School:	
									Community:	
		Individual:		<ul style="list-style-type: none"> • Lab safety worksheets • Scientific Method worksheets • Quizzes- Scientific Method & Lab Safety 			Experts:			
							Web:			
							Other: X (teachers)			

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Entry event to launch inquiry, engage students:	Read a copy of consumer reports to class. Give them an email/memo example from “Get-Mart” wanting them to compare their store brand items to toher name brand items so that they can create a new add campaign for the “Get-Mart” store brand. Findings will be presented to “Get-Mart” executives, concerned citizens, and critical lab sponsors.				
Assessments	Formative Assessments (During Project)	Quizzes/Tests- • Scientific Method Quiz • Lab Safety Quiz	X	Practice Presentations	X
		Journal/Learning Log		Notes • Science Lab Safety Outline • Folder Check	X
		Preliminary Plans/Outlines/Prototypes • Group Lab Report Protocol Rough Draft (created using Lab Report template)	X	Checklists • “Project Management Log: Group Tasks” form • “Group Observation Check List” (teacher) • “Self-Management- Self Assessment” form • “Self-Management- Teacher Evaluation” form	X
		Rough Drafts • Group Lab Report Protocol Rough Draft (created using Lab Report template)	X	Concept Maps	
		Online Tests/Exams		Other:	
	Summative Assessments (End of Project)	Written Product(s), with rubric: • Group Lab Report Protocol Final Draft- use Template & Rubric	X	Other Product(s) or Performance(s), with rubric: • “Power Point Content” Rubric	X
		Oral Presentation, with rubric • “Collaboration & Presentation” Rubric	X	Peer Evaluation • 2 nd Group to test Written Protocol • “Project Presentation Audience Feedback” form	X
		Multiple Choice/Short Answer Test		Self-Evaluation • “Self-Reflection on Project Work” form • “Self-Management- Self Assessment” form	X
		Essay Test		Other:	
Resources Needed	On-site people, facilities:	Science Teacher- Science Content IT Department- use of software: iMovie, Garage Band, Keynote (student choice) LA Teacher- how to outline a reading			
	Equipment:	Dependent on student designs and items tested			
	Materials:	Dependent on student designs and items tested			
	Community resources:				
Reflection Methods	(Individual, Group, and/or Whole Class)	Journal/Learning Log		Focus Group	
		Whole-Class Discussion		Fishbowl Discussion	

		Survey	Other: <ul style="list-style-type: none"> • “Project Presentation Audience Feedback” form • “Self-Reflection on Project Work” form • “Teacher’s Post-Project Review” form 	X
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*** Additional Grades- to be taken randomly for each group & individual throughout the project***

“Group Observation Checklist” (G)

“Self-Management Self-Assessment” (I)

“Self-Management Teacher Assessment” (I)

Estimated Grade Totals for entire project = 10 (I) + 8 (G) + 2 (I) for AA#1 & AA#2

PROJECT TEACHING AND LEARNING GUIDE

Project: Get-Mart Consumer Reports

Course/Semester: Science/1st Quarter

Knowledge and Skills Needed by Students
to successfully complete culminating products and performances, and do well on summative assessments

Scaffolding / Materials / Lessons to be Provided
by the project teacher, other teachers, experts, mentors, community members

Scientific Method Procedures

-
- Notes
 - Sponge Bob Worksheet (Scientific Method practice)
 - Apple Observation (done in LA?)
 - Scientific Method Quiz

Lab Safety Procedures

-
- Discuss good practices
 - Read & Outline “Safety First” pages of textbook
 - Lab Safety Worksheet
 - BR- Power Point Activities
 - Lab Safety Quiz

Scientific Report

-
- Teach how to write a report detailing information
 - Teach how to create a lab report (use lab report template & rubric)
 - Review how to write a complete conclusion
 - Peer editing
 - Teacher evaluation of final draft

Power Point/Keynote and Excel/Numbers

-
- Instruct how to use Excel/Numbers to create lab report data chart and graph
 - Instruct how to use Power Point/Keynote to create a presentation to share project information

Group Contract

-
- Instruct how to create a complete group contract that all students can agree upon

Project Calendar

Project Name: "Get-Mart"

Start Date: 8-23-10 Estimated End Date: 9-17-10

Project Week 1

TT- Team Time, **EE**- Entry Event, **L**- Lesson, **TL**- Team Leader

Day 1: 8-23-10	Day 2: 8-24-10	Day 3: 8-25-10	Day 4: 8-26-10	Day 5: 8-27-10
- Color of My Rainbow Activity (I) EE- "Get-Mart Memo" from Exec. - View Consumer Reports & Discuss - Know/Need to Know on Wall Wisher	- Project Teams announced (use Project Grouping Plan) TT- create a team contract using template & google.docs or typewith.me - Brief explanation of project expectations, use "Frank Scientific Inquiries Corporation" Task List/ Timeline - Begin discussing team product selection & criteria	- Finalize Team Contract, TL submit by Edmodo, Print copies for all students in each group (G) - Explanation of major project rubrics: Project Management Log- Group Tasks, Project Work Report- Individual & Group, Self-Management Rubric (Self & Teacher Assessment) TT- use rubric to define roles, task lists for members & project, pick a product & post the 3 versions of products on Edmodo Blog (supplies due by Monday, identify who is bringing what) (G)	L: Scientific Method Part 1- Question, Hypothesis, Materials - View & Discuss Lab Report Template & Rubric TT- create Question, Hypothesis, materials list by using Lab Report Template as a guide in google.docs or typewith.me - Begin Outline for HW as a class use "Lab Safety Outline Doc.pages" as template	BR- Lab Safety Power Point slides of Pics L: Scientific Methods Part 2, Test Experiment, Variables, Data collection, Conclusion TT- Continue Lab Report: detailed procedures that indicate safety procedures (example- **eye safety**) ???
HW- NONE	HW- Finish Team Contract (don't Print!)	HW- Team Contract Signed by group members and parents (paper copy) (I)	HW- Read & Outline Lab Safety Procedures submit by Edmodo.com (I)	HW- Study for Sci Method Quiz

Grades: (I)- 3; (G)- 2

Project Calendar

Project Name: "Get-Mart"

Start Date: 8-23-10 Estimated End Date: 9-17-10

Project Week 2

TT- Team Time, **EE**- Entry Event, **L**- Lesson, **TL**- Team Leader

Day 6: 8-30-10	Day 7: 9-1-10	Day 8: 9-2-10	Day 9: 9-3-10	Day 10: 9-4-10
Quiz- Lab Safety (I) TT- Switch procedures document with another group for editing & Identification of Safety Procedures - Use peer comments to edit Lab Report - Turn in Rough Draft of Lab Report to Edmodo (G) ***All supplies DUE***	TT- View teacher comments on procedures & once ok, begin setting up lab materials & testing products - Determine if testing needs to also be at home & who is responsible for which tests which nights - Create Data Table/Chart/Graph using Numbers, start experiment & begin recording Data	Quiz- Scientific Method (I) TT- continue experiment & recording Data - Modify procedures as necessary	TT- continue experiment & recording Data - Begin to finalize report with graph/chart/table of data & conclusion, refer to Lab Report Rubric (begin planning presentation for the "Get-Mart" Executives if finished testing- refer to PowerPoint Presentation Planning Guide & PowerPoint Rubric)	TT- finalize report with graph/chart/table of data & conclusion, refer to Lab Report Rubric - Begin creating presentation for the "Get-Mart" Executives, refer to PowerPoint Presentation Planning Guide & PowerPoint Rubric ***Due Date for Testing***
HW- Maratonite Wkst (I)	HW- Study Scientific Method Notes, Run Tests at home	HW- Run Tests at home	HW- Run Tests at home	HW- Run Tests at home

Grades: (I)- 3; (G)- 1

Project Calendar

Project Name: "Get-Mart"

Start Date: 8-23-10 Estimated End Date: 9-17-10

Project Week 3

TT- Team Time, **EE**- Entry Event, **L**- Lesson, **TL**- Team Leader

Day 11: 9-7-10	Day 12: 9-8-10	Day 13: 9-9-10	Day 14: 9-10-10	Day 15: 9-13-10
TT- finalize report with graph/chart/table of data & conclusion & turn in Final Draft of Lab Report to Edmodo (G) - Switch report with a new group & begin testing other group's product for verification of procedures & outcomes - Create new lab report for other group's product: hypothesis, data collection and conclusion - Create procedures for testing at home schedules & responsibilities outline in lab report	TT- Continue other group testing & data collection	TT- Continue other group testing & data collection (Begin presentation for the "Get-Mart" Executives if finished testing other group's product- refer to PowerPoint Presentation Planning Guide & PowerPoint Rubric)	TT- Continue other group testing & data collection - Finalize other group lab report & submit to Edmodo (G) & give a paper copy to original group - Examine both reports & begin presentation for Get-Mart Executives using the data collected from both groups running of the experiment - Discuss PowerPoint Presentation Planning Guide Template & Rubric for presentation, Identify & document presentation tasks & roles for each member using Rubric - Use storyboard (Pages?) to create presentation	- Examine both reports & begin presentation for Get-Mart Executives using the data collected from both groups running of the experiment, use storyboard doc (Pages) in typewith.me to create presentation - PowerPoint Presentation Planning Guide Template & Rubric for presentation, Identify & document presentation tasks & roles for each member using Rubric - Final draft of storyboard submitted to edmodo (G)
HW- Run Tests at home	HW- Run Tests at home	HW- Run Tests at home	HW- Work on presentation storyboard	HW- Finalize storyboard (if not already finished)

Grades: (I)- 0; (G)- 3

Project Calendar

Project Name: "Get-Mart"

Start Date: 8-23-10 Estimated End Date: 9-17-10

Project Week 4

TT- Team Time, EE- Entry Event, L- Lesson, TL- Team Leader				
Day 16: 9-14-10	Day 17: 9-15-10	Day 18: 9-16-10	Day 19: 9-17-10	Day 20: 9-20-10
- Final draft of storyboard submitted to edmodo - Begin recording presentation ("Collaboration & Presentation" Rubric & "Power Point Presentation" Rubric) - Presentation Day Checklist	- Record & practice presentation ("Collaboration & Presentation" Rubric & "Power Point Presentation" Rubric) - Presentation Day Checklist	- Record & practice presentation ("Collaboration & Presentation" Rubric & "Power Point Presentation" Rubric) - Presentation Day Checklist	- View presentations: "Project Presentation Audience Feedback" Wkst - "Collaboration & Presentation" Rubric- Assessment by Teacher (I) - "Power Point Presentation" Rubric- Assessment by Teacher (G)	((add this day if needed to view presentations)) - View presentations: "Project Presentation Audience Feedback" Wkst - "Collaboration & Presentation" Rubric- Assessment by Teacher - "Power Point Presentation" Rubric Assessment by Teacher ***Teacher's Post-Project Review Form***
HW- identified presentation tasks	HW- identified presentation tasks	HW- NONE (identified presentation tasks)	HW- "Self-Reflection on Project Work" Wkst (I)	HW- NONE

Grades: (I)- 2; (G)- 1