

Knowledge "Standard":
MST #4- understand and apply scientific concepts, principles, & theories pertaining to the physical setting and living environment...
Intermediate.- Living Environment
#5 - organisms maintain a dynamic equilibrium that sustains life

ACADEMIC CHALLENGE
Middle School
Science

Skill/Disposition "Standard":
C-DOS Standard 3a - mastery of a foundation skill essential for success in the workplace
Managing Resources /Intermediate
#7 - applies financial, and human factors, and the elements of time and materials to successfully carry out a planned activity.

Question/Issue:

How are whales *adapted* to their environment?

Challenge:

With the help of your teacher, arrange yourselves into well balanced teams of three (3). Plan and create a colorful, informative, easy-to-understand bulletin board display of your own unique design about a particular whale species that interests you. Your display should reveal accurate information in response to each of the following focus questions:

- (1) What is your whale species "like" (its unique *physiology*)?
- (2) What does your whale species "do" (its different *behaviors*)?
- (3) Where in the ocean does your whale live; what *environmental conditions* exist there?
- (4) How do you think the three questions above might be related?

To assist in your planning of this project, please turn in a project planning sheet at the end of today showing the work schedule for each member of the team for the remainder of the week. You are expected to implement this plan.

Your team will have three class periods to prepare your bulletin board. Be prepared to present your final product on Friday, 2:00 PM. All members of the team will be expected to be able to answer questions about your bulletin board and whale species.

Product criteria:

Bulletin Board

Form criteria

- Colorful - 3-5 different colors are used effectively
- Informative - gives viewer important information about the subject
- Easy-to-understand - audience can accurately interpret information
- Design of the bulletin board is unique - does not look exactly like that of any other team

Content criteria

- Each focus question is addressed directly
- All information about the whale species is accurate
- Focus "concepts" (*behavior, physiology, environment, adapted, etc.*) used appropriately
- Reveals "connections" among physiology, behavior, and environment of whale.

Evidence of:

β **Knowledge**

β **Skill**

β **Disposition**

Targeted "Standard(s)"/Indicator(s):

- **Knowledge** - understands and applies scientific concepts
LISTEN FOR > appropriate use of *focus concepts* in response to questions
- **Organization** - rations resources (time, people, materials) effectively
LOOK FOR > each team will submit and implement a project planning sheet detailing the work schedule for each member during the week

"Product" Checklist

Date: _____ Class Period: _____

Product Author(s):	Product Title/Name: "Whale Bulletin Board"	Evaluator Name(s):
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Observed	Standard/Criteria	Possible Points	Rating
	Bulletin Board - "form criteria"		
	• Colorful - 3-5 different colors are used effectively		
	• Informative - gives viewer important information about the subject		
	• Easy-to-understand - most viewers can accurately interpret information just by looking at display		
	• Design of the bulletin board is unique - does not look exactly like that of any other team		
	Bulletin Board - "content criteria"		
	• Each focus question is addressed directly		
	• All information about the whale species is accurate		
	• Reveals "connections" among physiology, behavior, and environment of whale		
	• Focus "concepts" (behavior, physiology, environment, etc.) used appropriately		
	TOTALS		