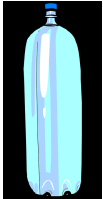
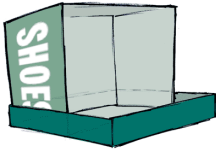


Choose one of the projects listed below to present to your class. Each project should demonstrate your understanding of how organisms and populations in an ecosystem depend on and may compete for biotic and abiotic factors.

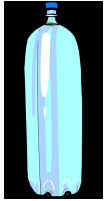
The image shows a StarBoard interactive whiteboard interface. At the top, there is a black horizontal bar. Below it, the board is divided into six sections, each with an icon and a project name. The sections are arranged in a 2x3 grid. The top-left section features a blue pop bottle icon and the text 'Pop Bottle Ecosystem'. The top-middle section features a fan of colorful cards with various organisms and the text 'Card Sort'. The top-right section features a green shoe box icon and the text 'Diorama'. The bottom-left section features a small pamphlet icon and the text 'Pamphlet'. The bottom-middle section features a cartoon scientist icon and the text 'Field Study'. The bottom-right section features a 3D figure with a large red question mark and the text 'Student Choice'. The board has a 'StarBoard' logo in the top-left corner and a 'HITACHI' logo in the top-right corner. There are also small icons along the left and right edges of the board.

 Pop Bottle Ecosystem	 Card Sort	 Diorama
 Pamphlet	 Field Study	 Student Choice

Abiotic-Biotic Choice Project

Name _____

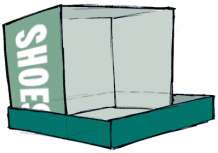
Choose one of the projects listed below to present to your class. Each project should demonstrate your understanding of how organisms and populations in an ecosystem depend on and may compete for biotic and abiotic factors



Pop Bottle Ecosystem - Make a pop Bottle Ecosystem to show how the animals, plants, and nonliving things in an environment all affect one another. Write up directions on how you made your ecosystem including what the abiotic and biotic factors are, and how they depend on or compete with other factors to survive. Include all new vocabulary words you have learned in this unit of study.



Pamphlet - Create a pamphlet that describes an ecosystem of your choice. Research its abiotic and biotic factors. Include in your brochure what the abiotic and biotic factors are and how they depend on or compete with other factors to survive. Include all new vocabulary words you have learned in this unit of study.



Diorama - Create a diorama of an ecosystem of your choice. Research its abiotic and biotic factors. Include with your diorama a written description of the abiotic and biotic factors. Be sure to include how organisms in your ecosystem depend on or compete with other factors for survival. Include all new vocabulary words you have learned in this unit of study.



Field Study - Choose an outdoor area on your schoolyard or at home where you will conduct a field investigation. Measure abiotic features and inventory biotic organisms observed in the areas. Abiotic measurements may include data collected on the soil, air, weather and water at the study site, among other factors. Write up a report on the ecosystem you chose. Be sure to include how organisms in your ecosystem depend on abiotic and biotic factors for survival.



Card Sort - Create a card sort for a 5th grade class. Research abiotic and biotic factors and how organisms depend on them for their survival. Include vocabulary you have learned in this unit of study on ecosystems as well as examples of how limiting factors affect organisms.



Student Choice – Present your idea to the teacher for approval. Must include abiotic and biotic factors and how they limit the survival of organisms in an ecosystem.