

Animal Behavior BioBlitz Project

Project Details:

1. Select 20 terms/concepts from the list below.
2. Go outside and find animals doing these things in nature.
 - a. You can observe animals at the zoo, but you may not use pets.
3. Take a picture or short video of the animal demonstrating the concept/term behavior.
4. Make sure your eraser animal is in the photo. If you are using a camera that makes it hard to have the eraser in the photo, you may take a second photo of the eraser with the animal/area that is of lesser quality to demonstrate that the photo of the animal was your original photo and not taken from the internet.
5. You may use an animal for a maximum of two concepts, but it may not be the same behavior/photo being used to demonstrate two concepts.
6. Write a brief description (1 paragraph max, a couple sentences is fine as long as you justify your image) and justification for each picture and term/concept. Identify the animal, and explain how the animal/behavior in your photo is an example of the term/concept. You may need to do a little research to make sure you're correct. Be sure to cite your sources. You should also underline/bold the term/concept your using.
7. Submit your photos or links to youtube videos that you took along with your justifications in a single Word document.
8. This is an independent project. You may not submit the same photos of the same animals doing the same behaviors as someone else in the class.
9. As is the case with a lot animal behavior research, husbandry is an important component. If you care for your eraser animal and submit it in good condition at the completion of your project, you'll receive 5 bonus points.

Example Submission:

1. **Aposematism**: *Catacanthus nigripes* is a Hemipteran commonly known as a man-faced bug that exhibits aposematic signaling. *Catacanthus nigripes* releases a toxic chemical that can be harmful to animals that attempt to eat it. It signals this information to potential predators through its bright coloration to warn them of its unprofitability as a prey item.



Grading Rubric:

Rubrics are a guide. Final grading will be determined by the grader based on the quality of the submission.

	0 pts	1 pt	1.5
Photo (1 pt)	No photo, photo from internet, same photo/behavior used more than once, same animal used more than twice	Photo/video contains eraser animal and was not photoshopped. Photo/video shows animal demonstrating behavioral concept.	
Description (1.5 pts)	No description or the picture doesn't show an example of the term/concept.	Description is present and includes the name of the animal and a basic description of the behavior along with a justification. The justification is minimal, unclear, doesn't demonstrate a full understanding of the concept, is vague, isn't completely correct, or lacks references (both in-text and citation list) when they were clearly used.	Description is clear and complete. If references were used, they were included. The behavior matches the concept/term, and the justification for the behavior photographed being an example of the term is well-reasoned, solid, and correct.

List of terms/concepts to choose from:

1. Cue
2. Signal
3. Dilution effect
4. Selfish herd
5. Territoriality
6. Intraspecific communication
7. Interspecific communication
8. Cognition
9. Learning
10. Parental investment
11. Fixed action pattern
12. Antipredator defense
13. Aposematism
14. Camouflage
15. Foraging behavior
16. Intrasexual selection
17. Intersexual selection
18. Competition
19. Honest signaling
20. Sexual dimorphism

21. Eavesdropping
22. Mate guarding
23. Eusociality
24. Kin selection
25. Mate choice
26. Mating display
27. Parental care
28. Runaway selection
29. Ideal free distribution
30. Navigation
31. Costly signaling
32. Monogamy
33. Polygamy
34. Polyandry
35. Lek
36. Associative learning
37. Classical conditioning
38. Operant conditioning
39. Habituation
40. Mobbing behavior
41. Artificial selection
42. Sensory Systems: Hearing
43. Sensory Systems: Vision
44. Sensory Systems: Magnetic reception
45. Sensory Systems: Chemical
46. Cooperation
47. Group living
48. Sociality
49. Circadian rhythm
50. Positive feedback
51. Negative feedback
52. Mutualism
53. Selfish behavior
54. Reciprocity
55. Parasitism
56. Altruism
57. Frequency dependent selection
58. Sensory exploitation
59. Evolutionary stable strategy
60. Stabilizing selection
61. Disrupting selection
62. Directional selection
63. Personality
64. Gene-environment interaction
65. Hybridization
66. Communication modalities: Chemical
67. Communication modalities: Visual

68. Communication modalities: Auditory
69. Physiological colors (pigmentation)
70. Structural colors
71. Multimodal communication
72. True communication
73. Spatial memory
74. Migration
75. Dispersal
76. Vigilance
77. Phenotypic plasticity
78. Ethical animal treatment
79. Imprinting
80. Releaser
81. Supersign stimulus
82. Theory of mind
83. Taste aversion
84. Tool use
85. Producer
86. Scrounger
87. Parental investment
88. Waggle dance
89. Landmark orientation
90. Territory