

Biology

GIZMO - Natural Selection

60 Points

Directions: Navigate to explorelearning.com, log in, and click on Natural Selection Gizmo.

Vocabulary: biological evolution, camouflage, Industrial Revolution, lichen, morph, natural selection, peppered moth

Prior Knowledge Questions (Do these **BEFORE** using the Gizmo.)

The **peppered moth** (*Biston betularia*) is a common moth found in Europe, Asia, and North America. It is commonly found in two forms, or **morphs**: a dark morph and a light, speckled morph. Birds are a frequent predator of the peppered moth.



1. Which morph do you think would be easier to see on a dark tree trunk? (1)

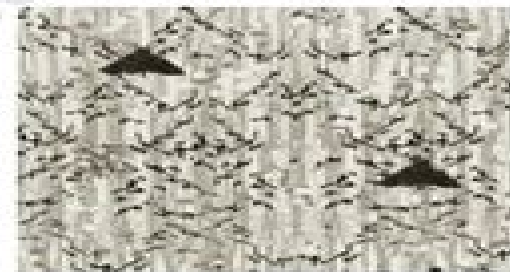
A Light Speckled Moth

2. Which morph do you think would be easier to see on a light tree trunk? (1)

A Dark Speckled Moth

Gizmo Warm-up

The Natural Selection Gizmo allows you to play the role of a bird feeding on peppered moths. The initial population of 40 moths is scattered over 20 tree trunks. Click on moths to capture them. Click the **Next tree** button (or the **spacebar** on your keyboard) to advance to the next tree.



3. Check that **LIGHT TREES** is selected. Click **Play** (▶), and hunt moths for one year.

A. How many dark moths did you capture? (1)

4

B. How many light moths did you capture? (1)

2

C. **Camouflage** is coloring or patterns that help an organism to blend in with the background. Which type of moth is better camouflaged on light bark? (1)

On the light bark, the light speckled moth is more camouflaged.

Natural Selection Gizmo Answer Sheet

Balaji

Sampath,Ravishankar,Marimuthu

Natural Selection Gizmo Answer Sheet:

It's a Jungle in There David A. Rosenbaum, 2014-02-03 The saying It's a jungle out there refers to a competitive environment in which you'd better hone your skills if you hope to survive And you'd better do what you can to keep a roof over your head food in your belly a leaf on your loins and a mate who'll help pass on your genes to the next generation of jungle Jims and Janes Distinguished professor and cognitive psychologist David Rosenbaum takes this metaphor of surviving in the wild and applies it to the competitive arena within the brain He argues that the overarching theory of biology Darwin's theory should be the overarching theory of cognitive psychology the science of mental functioning He explores this new and intriguing idea by showing how neural elements compete and cooperate in a kind of inner jungle where only the fittest survive Competition within your brain does as much to shape who you are as the physical and figurative competition you face externally Just as the jungle night seethes with noisy creatures beckoning their mates issuing their warnings and settling their arguments you might have trouble falling asleep at night because the thoughts in your head are fighting for their chance at survival Rosenbaum's pursuit of this bold idea explains why we are shaped into who we are for better or worse because we are the hosts of inner battlefields Written in a light hearted tone and with reference to hypothetical neural creatures making their way in a tough environment Rosenbaum makes cognitive psychology and his theory easy to understand and exciting to ponder Rather than rely on the series of disconnected phenomena and collection of curiosities that often constitute cognitive psychology It's a Jungle in There provides a fascinating way to place all cognitive phenomena under one flourishing tree PC Mag, 1987-08 PCMag.com is a leading authority on technology delivering Labs based independent reviews of the latest products and services Our expert industry analysis and practical solutions help you make better buying decisions and get more from technology Popular Photography, 1982-03 **India Today International**, 2000-10 PC, 1987 *Billboard*, 1951-10-13 In its 114th year Billboard remains the world's premier weekly music publication and a diverse digital events brand content and data licensing platform Billboard publishes the most trusted charts and offers unrivaled reporting about the latest music video gaming media digital and mobile entertainment issues and trends *PC Magazine*, 1987 **F & S Index United States Annual**, 2006 **IPTVisions**, 2000 Popular Photography, 1982 **Natural Selection**, **Evolution Natural Selection** Balaji Sampath, Ravishankar, Marimuthu, 2004 **The Statistics of Natural Selection on Animal Populations** Bryan Manly, 2014-01-15

Reviewing **Natural Selection Gizmo Answer Sheet**: Unlocking the Spellbinding Force of Linguistics

In a fast-paced world fueled by information and interconnectivity, the spellbinding force of linguistics has acquired newfound prominence. Its capacity to evoke emotions, stimulate contemplation, and stimulate metamorphosis is actually astonishing. Within the pages of "**Natural Selection Gizmo Answer Sheet**," an enthralling opus penned by a highly acclaimed wordsmith, readers set about an immersive expedition to unravel the intricate significance of language and its indelible imprint on our lives. Throughout this assessment, we shall delve into the book's central motifs, appraise its distinctive narrative style, and gauge its overarching influence on the minds of its readers.

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