

专八阅读训练：Cryptic Coloring PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/646/2021_2022__E4_B8_93_E5_85_AB_E9_98_85_E8_c94_646311.htm Cryptic Coloring Cryptic coloring is by far the commonest use of color in the struggle for existence. It is employed for the purpose of attack (aggressive resemblance or anticryptic coloring) as well as of defense (protective resemblance or procryptic coloring). The fact that the same method concealment, may be used both for attack and defense has been well explained by T.Belt who suggests as an illustration the rapidity of movement which is also made use of by both pursuer and pursued, which is similarly raised to a maximum in both by the gradual dying out of the slowest through a series of generations. Cryptic coloring is commonly associated with other aids in the struggle for life. Thus well-concealed mammals and birds, when discovered, will generally endeavor to escape by speed and will often attempt to defend themselves actively. On the other hand, small animals which have no means of active defense, such as large numbers of insects, frequently depend upon concealment alone. Protective resemblance is far commoner among animals than aggressive resemblance, in correspondence with the fact that predaceous forms are as a rule much larger and much less numerous than their prey. In the case of insectivorous Vertebrata and their prey such differences exist in an exaggerated form. Cryptic coloring, whether used for defense or attack, may be either general or special. In general resemblance the animal, in consequence of its coloring, produces the same effect as its

environment, but the conditions do not require any special adaptation of shape and outline. General resemblance is especially common among the animal inhabiting some uniformly colored expanse of the earth's surface, such as an ocean or a desert. In the former, animals of all shapes are frequently protected by their transparent blue color, on the latter, equally diverse forms are defended by their sandy appearance. The effect of a uniform appearance may be produced by a combination of tints in startling contrast. Thus the black and white stripes of the zebra blend together at a little distance, and " their proportion is such as exactly to match the pale tint which arid ground possesses when seen by moonlight. "

Special resemblance is far commoner than general and is the form which is usually met with on the diversified surface of the earth, on the shores, and in shallow water, as well as on the floating masses of algae on the surface of the ocean, such as the Sargasso Sea. In these environments the cryptic coloring of animals is usually aided by special modifications of shape, and by the instinct which leads them to assume particular attitudes. Complete stillness and the assumption of a certain attitude play an essential part in general resemblance on land. but in special resemblance the attitude is often highly specialized, and perhaps more important than any other element in the complex method by which concealment is effected. In special resemblance the combination of coloring, shape, and attitude is such as to produce a more or less exact resemblance to some one of the objects in the environment, such as a leaf of twig, a patch of lichen, a flake of bark. In all cases the resemblance is to some object which is

of no interest to the enemy or prey respectively. The animal is not hidden from view by becoming indistinguishable from its background as in the case of general resemblance, but it is mistaken for some well-known object. Seeking the interpretation of these most interesting and elaborate adaptations, attempts have been made along two lines. The first seeks to explain the effect as a result of the direct influence of the environment upon the individual (G.L.L. Buffon), or by the inherited effects of efforts and the use and disuse of parts (J.B.P. Lamarck). The second believes that natural selection produced the result and afterwards maintained it by the survival of the best concealed in each generation. The former suggestion breaks down when the complex nature of numerous special resemblances is appreciated. Thus the arrangement of colors of many kinds into an appropriate pattern requires the cooperation of a suitable shape and the rigidly exact adoption of a certain elaborate attitude. The latter is instinctive and thus depends on the central nervous system. The cryptic effect is due to the exact cooperation of all these factors. and in the present state of science, the only possible hole of an interpretation lies in the theory of natural selection, which can accumulate any and every variation which tends toward survival. A few of the chief types of methods by which concealment is effected may be briefly described. The colors of large numbers of vertebrate animals are darkest on the back and become gradually lighter on the sides, passing into white on the belly. Abbot H. Thayer has suggested that this gradation obliterates the appearance of solidity, which is due to shadow. The color harmony,

which is also essential to concealment, is produced because the back is of the same tint as the environment (e. g. earth), bathed in the cold blue-white of the sky, while the belly, being cold blue-white and bathed in shadow and yellow earth reflections produces the same effects. This method of neutralizing shadow for the purpose of concealment by increased lightness of tint was first suggested by E.B.Poulton in the case of a larva and a pupa, but he did not appreciate the great importance of the principle. In an analogous method an animal in front of a background of dark shadow may have part of its body obliterated by the existence of a dark tint, the remainder resembling, e.g., a part of a leaf. This method of rendering invisible any part which would interfere with the resemblance is well known in mimicry.

1. The black and white stripes of the zebra are most useful form [A] hunters. [B] nocturnal predators [C] lions and tigers. [D] insectivorous Vertebrata
2. Aggressive resemblance occurs when [A] a predaceous attitude is assumed. [B] special resemblance is utilized. [C] an animal relies on speed. [D] an animal blends in with its background.
3. Special resemblance differs from general resemblance in that the animal relies on [A] its ability to frighten its adversary. [B] speed. [C] its ability to assume an attitude. [D] mistaken identify
4. The title below that best expresses the ideas of this passage is [A] Cryptic coloration for Protection. [B] How Animals Survive. [C] The uses of Mimicry in Nature. [D] Resemblances of Animals.
5. Of the following which is the least common? [A] protective resemblance. [B] General resemblance. [C] Aggressive resemblance. [D] Special resemblance.

答案详解：1. B. 夜间活动

的食肉动物。见难句译注4，斑马的黑白相间颜色的比例正好和月光下所见的贫瘠土地的苍白的色泽相吻合。当然能保护斑马夜间免遭这些食肉动物的袭击。 A. 捕获者。 C. 狮子和老虎。 D. 食虫的脊椎动物 2. A. 在装成捕食其他动物的姿势时。 B. 应该专门模仿。 C. 动物依赖速度。 D. 动物和背景混在一起。 3. D. 搞错/认错了动物（身份）（mistaken identify 认错了人之义）。见第一段最后一句话，它不像一般模仿那样，通过动物和背景难以辨别从而从视觉中隐藏起来，它是被误认为某种著名动物。 A. 用以吓走它的对手（敌人）的能力。 B. 速度。 C. 采用某种姿势的能力。 4. C. 自然界模拟的运动。文章一开始就点明保护色迄今为止生存斗争中最常用的一种颜色，常用于进攻和防卫。保护色常和其他措施相配合，首先提到速度，见难句译注1。然后讲到保护色分类，一般（普通）和特殊（专门）模拟/模仿。第二段解释或说明模拟适应性。第一种解释为环境使然/影响。第二种认为是自然界选择之结果。 A. 为了保卫的保护色。 B. 动物是如何存活下来。 D. 动物之模仿性。 5. C. 进攻性（侵犯性）模仿。见难句译注2。 A. 保护色模仿。 B. 一般性模仿。 D. 专项模仿。 相关推荐：#0000ff>专八阅读模拟题：A Sense of Humor #0000ff>专八阅读模拟题：Exploration on the Origin of Continents #0000ff>专八阅读模拟题：Pop Stars Earn Much #0000ff>专八阅读：《肖申克救赎》里的智慧 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com