

新东方背诵文选80篇：55创造颜色CreatingColors PDF转换可能丢失图片或格式，建议阅读原文

[https://www.100test.com/kao\\_ti2020/214/2021\\_2022\\_\\_E6\\_96\\_B0\\_E4\\_B8\\_9C\\_E6\\_96\\_B9\\_E8\\_c96\\_214441.htm](https://www.100test.com/kao_ti2020/214/2021_2022__E6_96_B0_E4_B8_9C_E6_96_B9_E8_c96_214441.htm) 55 Creating Colors There are two ways to create colors in a photograph. One method, called additive, starts with three basic colors and adds them together to produce some other colors. The second method, called subtractive, starts with white light (a mixture of all colors in the spectrum) and by taking away some or all other colors leaves the one desired. In the additive method separate colored lights are combined to produce various other colors. The three additive primary colors are green, red and blue (each proportions, about one third of the wavelengths in the total spectrum). Mixed in varying proportions, they can produce all colors. Green and red light mix to produce yellow, red and blue light mix to produce magenta, green and blue mix to produce cyan. When equal parts of all three of these primary colored beams of light overlap, the mixture appears white to the eye. In the subtractive process, colors are produced when dye (as in paint or color photographic materials) absorbs some wavelengths and so passes on only part of the spectrum. The subtractive primaries are cyan (a bluish green), magenta (a purplish pink), and yellow. these are the pigments or dyes that absorb red, green and blue wavelengths, respectively, thus subtracting them from white light. These dye colors are the complementary colors to the three additive primaries of red, green and blue. Properly combined, the subtractive primaries can absorb all colors of light, producing black. But, mixed in varying

proportions they too can produce any color in the spectrum. Whether a particular color is obtained by adding colored lights together or by subtracting some light from the total spectrum, the result looks the same to the eye. The additive process was employed for early color photography. But the subtractive method, while requiring complex chemical techniques, has turned out to be more practical and is the basis of all modern color films. 创造颜色有两种方法可以使照片具有色彩。一种叫加色法，通过把三种基本颜色相叠加以产生其它色彩。另一种叫减色法，通过去除白色(其实是光谱中所有颜色相混合的结果)中的某些或其它所有色彩而把所需的色彩留下来。在加色法中，不同颜色的光线混合以产生其它各种色彩。加色法三原色是绿、红和蓝(其中每一种占据总光谱中三分之一的波长)。这三种色彩以不同比例相叠加可以产生所有色彩。绿光和红光叠加可产生黄色，红光与蓝光叠加可产生品红色，绿光与蓝光叠加可产生青绿色。当这三种原色光以相同比例叠加时，眼睛所见的就成为白色。而在减色法中，染料(比如在绘画颜料或彩色照相材料中)吸收了部分波长而只允许分光谱通过，从而产生各种色彩。减色法三原色是青绿色、品红(略带紫色的粉红色)和黄色；也就是可分别吸收红光、绿光和蓝光的色料或染料，从而去除白色光中的这些色彩。这些染料色是加色法的三原色红、绿、蓝的相互补充。适当组合时，减色法三原色能吸收光线中的所有色彩，产生黑色。但当它们以不同的比例叠加时，也能产生光谱中所有颜色。不论某种颜色是通过把不同色彩的光线叠加还是把光谱中某些颜色的光去除掉而产生的，它的视觉效果是一样的。早期彩色摄影采用加色法。但减

色法尽管需要复杂的化学技术，最终比前者更加实用，并成为现代彩色电影的基础。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](http://www.100test.com)