

高二英语第二十三期 • 语法填空自测

注意：限时 8 分钟

Section A

Directions: After reading the passages below, fill in the blanks to make the passages coherent and grammatically correct. For the blanks with a given word, fill in each blank with the proper form of the given word; for the other blanks, use one word that best fits each blank.

You've probably seen pictures of Greek villages, __1__ every house is painted bright white. The paint reflects the intense sunlight of the Mediterranean. And it works pretty well to keep the houses __2__ heating up in the sun. But it doesn't actively cool them.

To understand why, consider __3__ the white paint does. Here's how optical scientist Xiaobo Yin of the University of Colorado describes it: "It's a mirror for the sunlight, and it's also a mirror for the radiation as well." And it might seem like __4__ (reflect) all those incoming rays would be a good thing. But the benefit is limited, because what it really means is __5__ the houses don't release much energy. Release more energy, again in the form of infrared radiation, aka heat—and you effectively get free A/C.

So Yin and his colleagues built a material that does exactly that: reflects visible light, but also emits infrared wavelengths, which gives it the power to actually cool. It's two layers: a top layer of polymer, __6__ (pack) with glass beads just eight microns across—so they can absorb and then emit infrared radiation and a silver coating on the bottom.

The material reflects 96 percent of solar radiation—a slight improvement on white and silver paint. But the game-changing part: it also has a cooling power of about 100 watts per square meter. Translation: enough __7__ (cool) a frying-pan-sized amount of water to about 15 degrees Fahrenheit cooler than ambient temps even __8__ you sit in the sun. The finding is in the journal Science.

That cool water example has wide applications. This water __9__ be used to cool a house, cool a data center, or even cool a thermoelectric power plant, according to Yin's colleague at the University of Colorado, Ronggui Yang. He adds, “__10__ it's a cheap way to cool things down, don't put the material directly on your roof. It also cools down during the wintertime. And you do not want that to happen.” No. Definitely... not cool.

答案由高二英语第二十四期提供（每周一期）

高二英语第二十二期语法填空答案：

1. to alert 2. that 3. are equipped 4. between 5. If
6. that 7. can/does 8. where 9. safer 10. to build

如果本套试题有不会的题目，请于每周五，周六，周日下午 16:00——17:00 来吉地教育五角场校区，一线教师，**免费**为你一对一答疑！