



Exercise 3

Read the article about building houses under the ground, and then complete the notes.

Why don't we live underground?

It may surprise you to learn that living below ground has a very long history. Ancient underground cities have been found in several locations, such as Derinkuyu in Turkey, which dates back over 1000 years and had up to 20 000 inhabitants. Such places were constructed in times of danger because they provided good security, especially when compared to above-ground communities.

While safety is less of a consideration today, there are still many advantages to choosing an underground lifestyle. Nowadays, a new generation has recognised this and people are constructing homes either completely underground, or more commonly underground on three sides. There are a number of reasons for this. Firstly, underground homes are constructed so as to fit in with the natural landscape, and secondly, the builders of underground houses use fewer building materials. Also, if the fourth side of the building has windows and doors that can be opened to let sunlight in, this addresses a risk commonly associated with underground living: we humans need sunlight if we are to avoid a lack of vitamin D – the only vitamin we require that we get from the sun – which is vital for our health. Finally, underground houses remain at an almost constant temperature throughout the year. Aside from this being a bonus in itself, it allows the homeowner to save energy.

The main concern for owners of underground houses is probably water leaking in. However, most modern underground houses are very effective at preventing this as their walls include a waterproof layer. In fact, underground houses can even be designed to collect water in special underground tanks. As we know, water is a precious resource, so no one can deny that this is a clear advantage of underground living.

One of the biggest issues for the owners of normal, above-ground houses is the fact that they require regular maintenance. This can be less of a worry for the owners of modern underground houses. Provided that the construction of their houses is strong enough to resist damage from tree roots, the owners will save money on repair costs. Also, improved construction techniques in the latest generation of underground houses have helped overcome most potential risks from earth movement. In fact, underground houses are generally much safer than tall buildings as they shake far less.

Thousands of people in Europe and America now live in underground homes, and countries like Japan and China are particularly keen to build underground living places as they enable people to make more efficient use of land. In other countries, such as the UK, progress is currently much slower. This is partly due to mistaken beliefs that underground homes are dark and damp. As it is predicted that the world's population could reach nine billion by 2050, such prejudices could become a thing of the past in the search for living space.



Question 8

Environmental benefits of underground houses:

Example: fit in with the natural landscape

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