## **A Brave Bouquet**

Imagine hoisting yourself over jagged rocks and scaling steep ledges on a cold mountain. As you climb higher, the air gets thinner and the sun's rays more intense. Just before you reach the snowline at about 10,000 feet, you find what you came looking for. A small, white flower is nestled in craggy rocks. The name of the flower is the "edelweiss," and it only grows in alpine regions.

The alpine region is named after its snow-capped mountains, called the "alps." The French word for "high mountains" is "alpes," which is how mountain ranges like the Swiss Alps and the Himalayan Alps got their names. The habitat of this area is called an "alpine" biome. Plants face many challenges living in this environment. This is why only 200 different kinds of plants can grow there.

Plants rely on oxygen, water, and sunlight to make their own food through the process of photosynthesis. The high altitude in the alps means there is less carbon monoxide, which makes photosynthesis more difficult. The high elevation also brings plants much closer to the sun. The sunlight is more intense and can scorch a plant's leaves. There is little water in alpine areas, so the soil is dry and rocky. You also won't find any high trees because the cold wind would blow them over!

Alpine plants have features that help them survive the harsh alpine conditions. Like all alpine plants, the edelweiss stays close to the ground to avoid the wind. Melted snow is the only source of moisture, and the cold water is deep underground. So the edelweiss grows very deep roots that push down through the rocky soil. The edelweiss leaves have a thick covering that feels like felt. This protects the plant from the wind and the sun's bright rays. All these special features help the plant grow, but it still grows very slowly.

The edelweiss can withstand the alpine conditions, but humans can't. Climbing into the alps is dangerous and difficult. This is why the edelweiss became such a special flower. Long ago, a young man would pick an edelweiss flower to prove his love to a girl. It was risky to climb the rocky cliffs in search of the edelweiss. Many men died while trying, either from falling or from the severe weather. Obtaining the flower proved that the man was physically strong, courageous, and devoted. In fact, the word *edelweiss* 

means "noble and white" in German. Only a noble person could reach the flower, and its white flowering leaves are like snowflakes—no two are alike.

Alpine plants can't spread seeds, so it's difficult for new plants to grow. Once all the edelweiss flowers are gone in an area, they will not re-grow. Governments help protect the edelweiss by declaring it an endangered plant. You won't find people picking the flowers like they did years ago. Today, the noble thing to do is to admire the white edelweiss and let it continue to grow.



## The words in both columns are from the reading passage. Use context clues to figure out which words have similar meanings. Draw a line to connect the synonyms.

1. scaling 2. altitude 3. craggy 4. severe 5. biome

- a. rocky
- b. harsh
- c. habitat
- d. climbing
- e. elevation

## Fill in each blank with the correct word from the word box.

| snowline  | scorch                   | endangered             | photosynthesis           |
|---|--------------------------|------------------------|--------------------------|
| alpine  | devoted                  | noble                  | withstand                |
|   |                          |                        |                          |
| t ti ala ila da a la a                            |                          | 7)                     | la:                      |
| High in the mountains you'll find the 1)          |                          |                        | biome at about           |
| 10,000 feet, just below the 2)                    |                          |                        | There is less carbon     |
| monoxide at this altitude, so 3)                  |                          |                        | is more difficult for    |
| plants. The sun is more intense and can 4)        |                          |                        | the plant                |
| leaves. The edelweiss is one plant that can 5)    |                          |                        | the alpine               |
| conditions. Young men tried to prove they were 6) |                          |                        | by bringing              |
| an edelweiss back from the high alps. Only a 7)   |                          |                        | person                   |
| could reach the                                   | flower. It's difficult f | or edelweiss to re-aro | w, so today the plant is |

## Answer the questions.

| 1. | What are the conditions like in the alpine biome?      |
|----|--|
| 2. | How many types of plants can grow in the alpine biome? |
| 3. | Why is photosynthesis difficult at high elevations?    |
| 4. | Why do alpine plants stay close to the ground?         |
| 5. | What features help the edelweiss plant survive?        |
| 6. | Why did young men try to pick edelweiss?               |
| 7. | Why is the edelweiss endangered?                       |
| 8. | Write the main idea of the passage.                    |
|    |  |