

WHAT DO WE CALL THE PROCESS BY WHICH PLANTS ABSORB CO<sub>2</sub> FROM THE SURROUNDING ENVIRONMENT AND CONVERT IT?

- A: Hypophysis
- B: Evaporation
- C: Solar thermal energy
- D: Photosynthesis



Please use the grey stamp!

When the fruits of the **MAPLE TREE** fall to earth, they rotate like little helicopters as they fall.



Please use the white stamp!





Plants can perform  
**PHOTOSYNTHESIS!**



“ During photosynthesis, plants convert carbon dioxide – also known as  $\text{CO}_2$ . The green plant parts absorb the  $\text{CO}_2$  from the air and using sunlight and water from the roots convert it into oxygen and glucose. The plants do not need the oxygen and emit it to their environment. Glucose is the starting material for the plant’s growth. All parts of the plant right through to the wood and the bark of the trees are formed from it. ”





# NORWAY MAPLE

Acer platanoides

We trees are as diverse as the flowers on the meadow. Pay attention to the different trunks that you see in the forest. They vary in colour and thickness but primarily in terms of the appearance of their barks. We trees also produce a very wide variety of leaf shapes and colours. And then there are also the fruits we produce. Look at the forest floor! Can you find any fruit that has fallen from the trees? Maybe they are sprouting at the moment and letting a new generation of trees come into being.

An old Norway maple is a **MAJESTIC TREE** with a really thick trunk. The bark of the tree is dark and exhibits longitudinal cracking from the top to the bottom.



The unique thing about the Norway maple in comparison to all the other domestic types of maple tree is that it **COMES INTO BLOOM** before its leaves even shoot.



In German, it is called "Spitzahorn" – "pointed maple" – and owes its name to its **LEAVES**. Can you see why?



Its **FRUITS** always come in pairs and look like wings. When they come loose from the branch, they rotate like little propellers as they fall to the ground.





# ENGLISH OAK

Quercus robur

The English oak can grow to be a really **TALL TREE** up to 40 metres in height. Its trunk is covered in a greyish/brownish ribbed bark.



The wood of every tree type is unique. It differs not only in terms of its colour and the direction of the grain, but also with regard to its hardness, durability and thickness. What many people do not know is that our wood also sounds different. Try this out now at the tonewood activity station!



While the male **BLOOMS** hang down as if from strings of pearls, the female blooms stand up on short stalks and are fairly inconspicuous.



The **LEAVES** of the oak tree are definitely one of the most readily recognised types of leaf. They are heavily sinuated.



The **FRUITS** are very rich in nutrients and welcome food not only for animals. Since the Stone Age, they have also been used by humans for flour or as a substitute for coffee, among other things. However the bitter substances must first be removed.

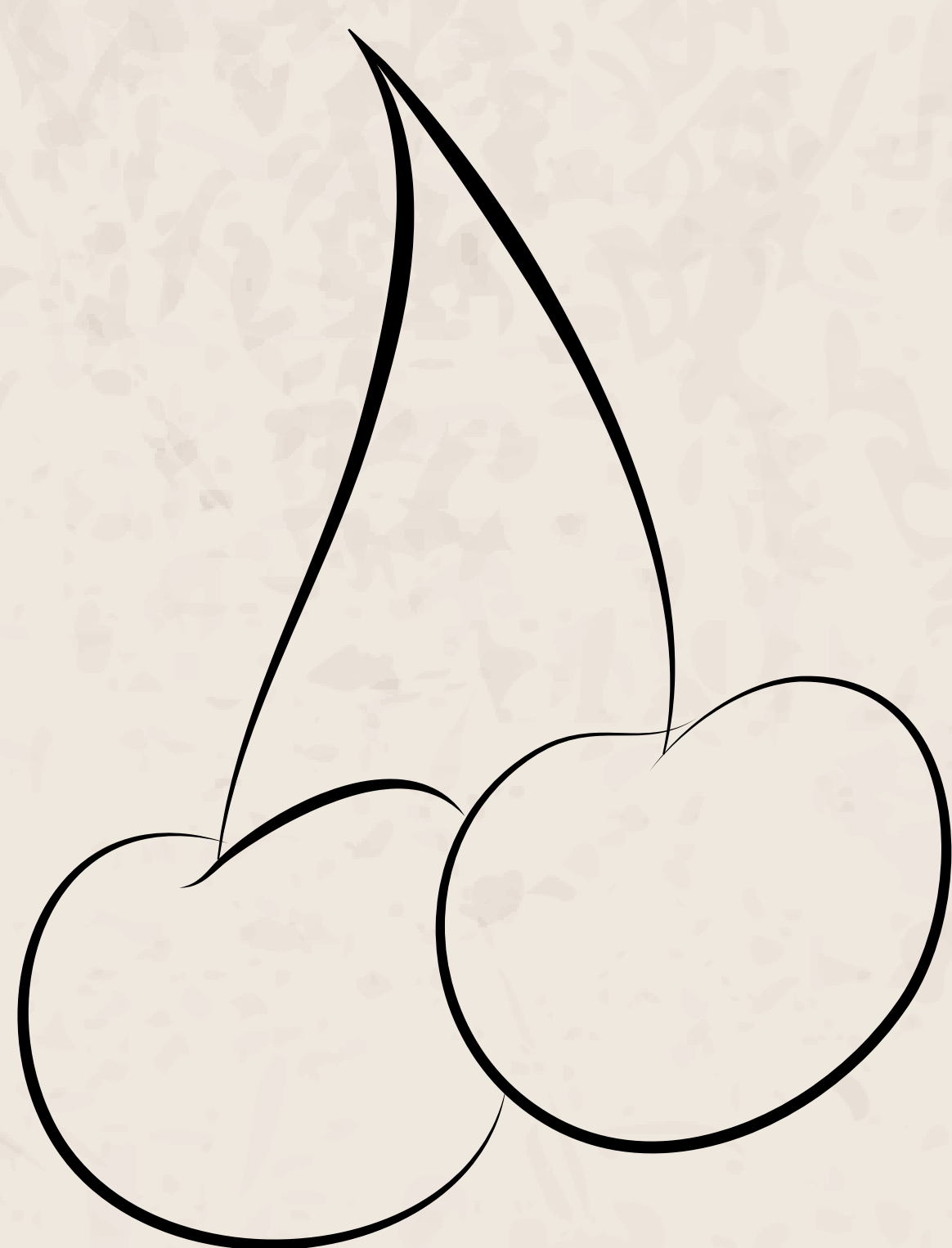




# WILD CHERRY

Prunus avium

**CHERRY TREES** have a very distinctive trunk. Their bark is smooth, dark grey and striated.



**CHERRY BLOSSOMS** are grouped together like little balls of cotton wool on the branches. In spring they exude a heavenly sweet scent.

The **LEAVES** of the wild cherry are elongated, pointed at the top and have numerous little spikes at the edges.



The wild cherry tree is the wild form of the cultivated sweet cherry tree. Its name is attributed to the predilection of birds for its round, red **FRUITS**.





# COPPER BEECH

Fagus sylvatica



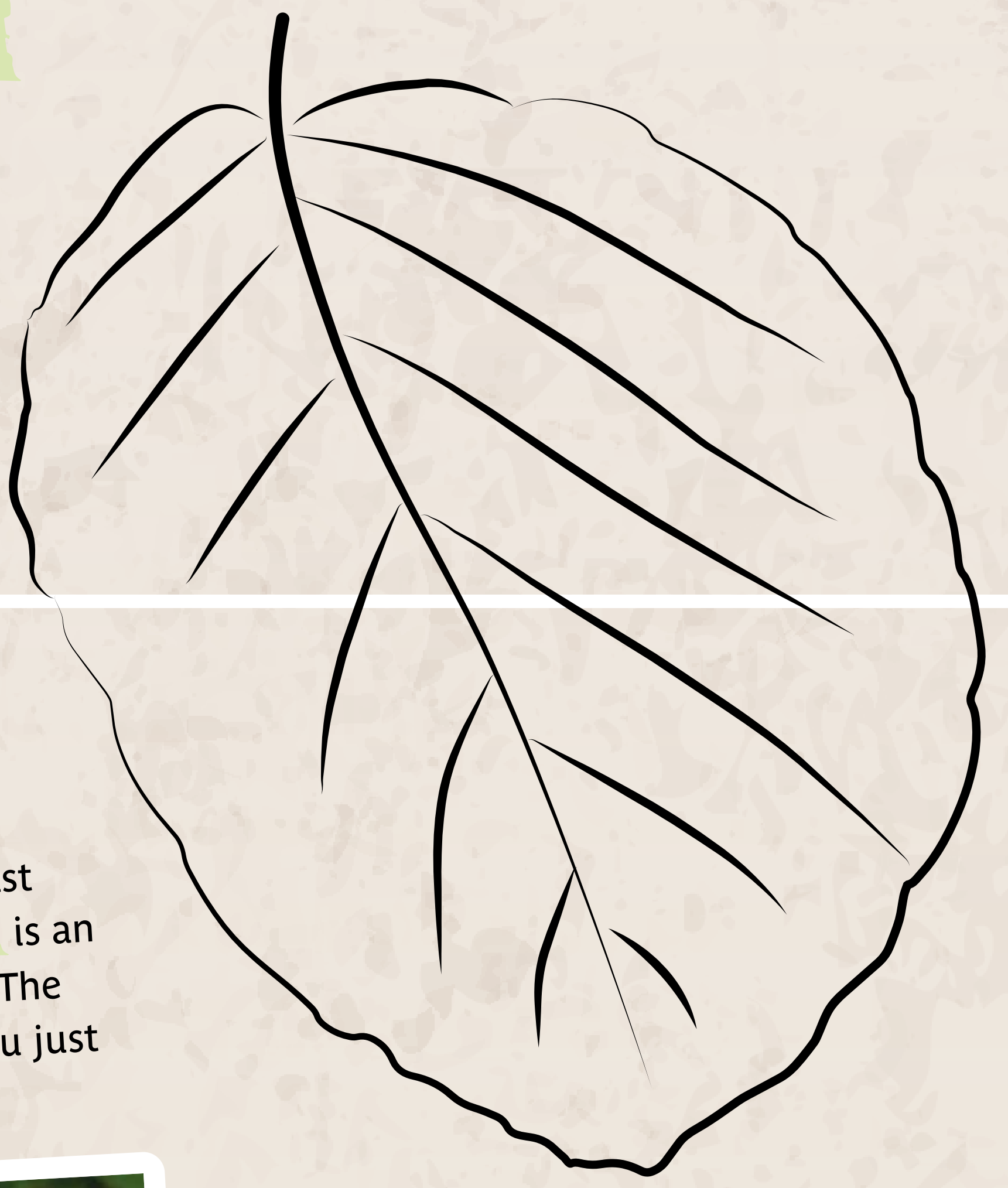
The copper beech has a very smooth, grey **BARK**. The smooth trunk makes copper beeches sensitive to the sun. They benefit from shade-giving undergrowth. In very old beeches, the lower reaches of the trunk gradually become rough and bulging.



The **BLOOMS** of the red beeches are divided up into male and female blooms. The female blooms stand on shorter stems, the males hang on longer stems.



In autumn, the **LEAVES** of the beech change colour into a particularly strong red/orange shade.



The **FRUITS** are called beechnuts. In most years, approximately every 5 years, there is an abundance of fruit around the beeches. The beechnuts are edible and taste nutty. You just shouldn't eat too many of them!

