Name: _____ Date: _____

Cork: Bark That Grows Back

Circle group

Most trees die if you strip off their bark. The cork oak is different. It grows near the western Mediterranean Sea. Its thick, spongy bark can be taken off and the tree is fine. A new layer grows back.

Workers wait until a tree is about twenty-five years old. Then they cut the bark with a special axe. They pull off big curved planks. The planks dry outside for months. Then they are boiled and flattened. Workers punch bottle stoppers out of the best pieces. The scraps are ground up. They make floor tiles, bulletin boards and the insides of shoes.

Cork is built in a useful way. Its cells are tiny and full of air. So cork is light and springy. It does not pass heat well. It also keeps water out. A cork stopper can seal a bottle for years. A cork floor feels warm on bare feet.

The trees are harvested again after about nine years. The bark needs time to grow thick. Many cork forests are protected. Birds and other wildlife live there. A cared-for tree can be harvested many times. The forest stays, and people still use the bark.

Questions

1. What happens after cork bark is taken off a cork oak?

_____

_____

2. How old is a tree before its first harvest?

_____

_____

3. What are two things made from cork scraps?

_____

_____

4. Why is cork light and slow to pass heat?

_____

_____

5. Why do workers wait about nine years between harvests?

_____

_____

6. How does harvesting cork help keep forests standing?

_____

_____

Words to know

harvest: to gather a crop or a natural material when it is ready
planks: long, flat pieces of wood or bark
stoppers: plugs that close the opening of a bottle
spongy: soft and springy, with many tiny holes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Cork: Bark That Grows Back

Triangle group

Most trees would die if you stripped their bark. The cork oak is a rare exception. It grows around the western Mediterranean, and its thick, spongy outer bark can be removed without harming the tree. A new layer then grows to replace it.

Harvesters wait until a tree is about twenty-five years old before the first harvest. They cut through the bark with a special axe and pull away large curved planks. The planks are left to dry outdoors for months, then boiled and flattened. Workers punch stoppers for bottles out of the best pieces, and the scraps are ground up for floor tiles, bulletin boards and the insides of shoes.

Cork is useful because of how it is built. Its cells are tiny and filled with air, so the material is light, springy and a poor carrier of heat. It also pushes back against water. That is why a cork stopper can seal a bottle for years and why a cork floor feels warm under bare feet.

The trees are harvested again only after about nine years, which gives the bark time to thicken. Many cork forests are protected because they shelter birds and other wildlife. A tree that is cared for properly can be harvested many times in its long life, so the forest stays standing while people use its bark.

Questions

1. What happens after cork bark is removed from a cork oak?

_____

_____

2. How old is a tree before its first harvest?

_____

_____

3. What are two things made from cork scraps?

_____

_____

4. Why is cork light and a poor carrier of heat?

_____

_____

5. Why do harvesters wait about nine years between harvests?

_____

_____

6. How does harvesting cork help keep forests standing?

_____

_____

Words to know

harvest: to gather a crop or a natural material when it is ready
planks: long, flat pieces of wood or bark
stoppers: plugs that close the opening of a bottle
spongy: soft and springy, with many tiny holes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Cork: Bark That Grows Back

Square group

Most trees would perish if their bark were stripped away, but the cork oak is a rare exception. It grows around the western Mediterranean, and its thick, spongy outer bark can be removed without harming the tree, because a new layer develops to replace it.

Harvesters wait until a tree is roughly twenty-five years old before the first harvest. They cut through the bark with a specialized axe and peel away large, curved planks. The planks are left to dry outdoors for several months, then boiled and flattened. Workers punch bottle stoppers out of the finest pieces, while the scraps are ground up and made into floor tiles, bulletin boards and the insides of shoes.

Cork is valuable because of the way it is constructed. Its cells are minute and filled with air, which makes the material light, springy and a poor conductor of heat. It also resists water. That explains why a cork stopper can seal a bottle for years and why a cork floor feels warm beneath bare feet.

The trees are harvested again only after about nine years, which allows the bark to thicken. Many cork forests are protected because they shelter birds and other wildlife. A tree that is looked after properly can be harvested many times during its long life, so the forest remains standing even as people make use of its bark.

Questions

1. What happens after cork bark is removed from a cork oak?

_____

_____

2. How old is a tree before its first harvest?

_____

_____

3. What are two things made from ground cork scraps?

_____

_____

4. Why is cork light and a poor conductor of heat?

_____

_____

5. Why do harvesters wait about nine years between harvests?

_____

_____

6. How does harvesting cork help keep forests standing?

_____

_____

Words to know

harvest: to gather a crop or a natural material when it is ready
planks: long, flat pieces of wood or bark
stoppers: plugs that close the opening of a bottle
spongy: soft and springy, with many tiny holes

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Cork: Bark That Grows Back

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Cork: Bark That Grows Back

Easier · 196 words · Flesch-Kincaid grade 2.2

1. A new layer of bark grows back.
2. About twenty-five years old.
3. Floor tiles, bulletin boards, or the insides of shoes.
4. Its tiny cells are full of air.
5. The new bark needs time to grow thick again.
6. People use the bark without cutting down the trees, so the forests are worth protecting.

Triangle: Cork: Bark That Grows Back

This passage · 224 words · Flesch-Kincaid grade 6

1. A new layer of bark grows back.
2. About twenty-five years old.
3. Floor tiles, bulletin boards, or the insides of shoes.
4. Its tiny cells are filled with air.
5. The new bark needs time to grow thick again.
6. People earn from the bark without cutting down the trees, so the forests are worth protecting.

Square: Cork: Bark That Grows Back

Harder · 229 words · Flesch-Kincaid grade 7.9

1. A new layer of bark develops to replace it.
2. Roughly twenty-five years old.
3. Floor tiles, bulletin boards, or the insides of shoes.
4. Its minute cells are filled with air.
5. The new bark needs time to thicken again.
6. People earn a living from the bark without felling the trees, so the forests are worth protecting.