Name: _____ Date: _____

Cochineal: A Red Dye from Tiny Dried Insects

Circle group

A bright red cloth seems to come from a plant. But one of the best-known reds came from an insect. The cochineal is a tiny bug. It lives on prickly pear cactus in warm parts of the Americas. People dry and crush the females. They give a strong crimson color.

People in Mexico and Central and South America used this dye long before European ships came. They picked the insects by hand. They brushed them off the cactus pads with a small tool. It took a huge number of insects to make a little dye. So the color was precious.

Sailors from Spain brought cochineal across the ocean. The red became a valued trade good in Europe. It made cloaks and robes glow a deep scarlet. For a long time, buyers did not know it came from a bug. They only knew the red did not fade easily.

Today, chemists can make many reds in a lab. Even so, cochineal is still used in some art supplies, cosmetics, and foods. On a food label it may be listed as carmine. Some people choose to avoid it for that reason.

Questions

1. What plant does the cochineal live on?

_____

_____

2. How is the insect turned into dye?

_____

_____

3. Who used the dye before European ships came?

_____

_____

4. What name might cochineal have on a food label?

_____

_____

5. Why was the dye precious?

_____

_____

6. Why might some people avoid this dye?

_____

_____

Words to know

cochineal: a tiny insect used to make a red dye
crimson: a deep, rich red color
precious: very valuable and not easy to get
scarlet: a bright red color

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: _____

Cochineal: A Red Dye from Tiny Dried Insects

Triangle group

A brilliant red cloth may seem to come from a plant, but one of the most famous reds in history came from an insect. The cochineal is a tiny bug that lives on prickly pear cactus in the warm parts of the Americas. When the females are dried and crushed, they give off a strong crimson color.

People in Mexico and Central and South America were using this dye long before European ships arrived. They collected the insects by hand, brushing them off the cactus pads with a small tool. It took a huge number of the insects to make even a small amount of dye, so the color was precious.

After sailors from Spain brought cochineal across the ocean, the red became a valued trade good in Europe. It made fabrics, such as the cloaks of soldiers and the robes of rich people, glow a rich, deep scarlet. For a long time, the people who bought it had no idea that it came from a bug. They only knew it made a wonderful red that did not fade easily.

Today, chemists can make many reds in a laboratory. Even so, cochineal is still used in some art supplies, cosmetics, and foods. On a food label it may be listed as carmine, and some people prefer to avoid it for that reason.

Questions

1. What plant does the cochineal insect live on?

_____

_____

2. How do people turn the insects into dye?

_____

_____

3. Who used the dye before European ships arrived?

_____

_____

4. What name might cochineal have on a food label?

_____

_____

5. Why was cochineal dye precious?

_____

_____

6. Why would some people avoid products with this dye?

_____

_____

Words to know

cochineal: a tiny insect used to make a red dye
crimson: a deep, rich red color
precious: very valuable and not easy to get
fabric: cloth made by weaving or knitting
scarlet: a bright red color

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: _____

Cochineal: A Red Dye from Tiny Dried Insects

Square group

A brilliant red cloth might appear to owe its color to a plant, yet one of the most celebrated reds in history was extracted from an insect. The cochineal is a minute bug that lives on prickly pear cactus in the warm regions of the Americas. When the females are dried and crushed, they release a powerful crimson pigment.

People in Mexico and in Central and South America were using this dye long before European ships arrived. They gathered the insects by hand, brushing them from the cactus pads with a small tool. An enormous number of the creatures was required to produce even a small quantity of dye, which made the color extremely precious.

After sailors from Spain carried cochineal across the ocean, the red became a highly valued trade good in Europe. It caused fabrics, such as the cloaks of soldiers and the robes of wealthy people, to glow a rich, deep scarlet. For a long time, those who purchased it had no idea that it originated from a bug. They knew only that it produced a wonderful red that did not fade easily.

Today, chemists are able to manufacture many reds in a laboratory. Nevertheless, cochineal is still employed in certain art supplies, cosmetics, and foods. On a food label it may be listed as carmine, and some people prefer to avoid it for that reason.

Questions

1. On which plant does the cochineal insect live?

_____

_____

2. How do people turn the insects into dye?

_____

_____

3. Who used the dye before European ships arrived?

_____

_____

4. What name might cochineal carry on a food label?

_____

_____

5. Why did the color count as precious?

_____

_____

6. Why might some people prefer to avoid products containing this dye?

_____

_____

Words to know

cochineal: a tiny insect used to make a red dye
crimson: a deep, rich red color
precious: very valuable and not easy to get
fabric: cloth made by weaving or knitting
scarlet: a bright red color

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: Cochineal: A Red Dye from Tiny Dried Insects

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

Circle: Cochineal: A Red Dye from Tiny Dried Insects

Easier · 190 words · Flesch-Kincaid grade 3.7

1. The prickly pear cactus.
2. The females are dried and crushed.
3. People in Mexico and Central and South America.
4. Carmine.
5. It took a huge number of insects to make a little dye.
6. It comes from insects, and they may not want to use a bug product.

Triangle: Cochineal: A Red Dye from Tiny Dried Insects

This passage · 222 words · Flesch-Kincaid grade 7.4

1. The prickly pear cactus.
2. They dry and crush the females.
3. People in Mexico and Central and South America.
4. Carmine.
5. It took a huge number of insects to make a small amount.
6. It comes from insects, and they may not want to eat or use a product made from bugs.

Square: Cochineal: A Red Dye from Tiny Dried Insects

Harder · 229 words · Flesch-Kincaid grade 9.2

1. The prickly pear cactus.
2. They dry and crush the females.
3. People in Mexico and in Central and South America.
4. Carmine.
5. An enormous number of insects was needed to make a small quantity of dye.
6. It comes from insects, and they may not wish to eat or use something made from bugs.