Name: _____ Date: _____

The Blue That Once Cost More Than Gold

Circle group

Look at the robes in many old paintings, and you may see a deep, rich blue. That color was often ultramarine. For a long time it was one of the most precious things an artist could buy. Its name means "beyond the sea." Traders carried the raw stone from far-off mines in Afghanistan.

The source was a bright blue stone called lapis lazuli. Making paint from it was hard. The stone was ground into powder. It was mixed with wax, resin and oils into a soft dough. The dough was then kneaded in a liquid. This slowly washed the pure blue bits out of the gray and white rock. The finest blue came out first. Later batches were paler and cost less.

The work was hard and the stone was rare. So the paint sometimes cost more than the gold on the same painting. People who ordered a painting often wrote the amount of ultramarine in the contract. Artists saved it for the most important parts. They used cheaper blues for the sky.

Things changed in the early 1800s. Chemists found a way to make a similar blue in a laboratory. It was much cheaper. Painters could use bright blue freely. Today you can buy it in a tube. Few people know it once came from a trip across mountains and seas.

Questions

1. What does the name ultramarine mean?

_____

_____

2. What stone was used to make ultramarine paint?

_____

_____

3. What washed the pure blue out of the rock?

_____

_____

4. When did chemists find a way to make a similar blue in a laboratory?

_____

_____

5. Why did artists save ultramarine for the most important parts?

_____

_____

6. How did the laboratory version change painting?

_____

_____

Words to know

ultramarine: a deep blue color made from lapis lazuli

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: _____

The Blue That Once Cost More Than Gold

Triangle group

Look closely at the robes in many paintings from the Middle Ages and the Renaissance, and you may spot a deep, rich blue. That color was often ultramarine, and for a long time it was one of the most precious materials an artist could buy. Its name means "beyond the sea," because the raw material was carried by traders from far-off mines in Afghanistan.

The source was a bright blue stone called lapis lazuli. Turning the stone into paint was a long and difficult process. The stone had to be ground into powder and mixed with wax, resin and oils into a soft dough. This dough was then kneaded in a liquid solution, which slowly washed the pure blue particles out of the gray and white bits of rock. The finest blue came out first, and later batches were paler and less costly.

Because the work was so demanding and the stone so scarce, the paint sometimes cost more than the value of the gold used on the same artwork. Patrons who ordered a painting often listed the exact amount of ultramarine in their contracts. Artists saved it for the most important subjects, and they used cheaper blues for the sky and background.

Everything changed in the early nineteenth century, when chemists found a way to make a similar pigment in a laboratory. Synthetic ultramarine was far cheaper, and it let painters use brilliant blue freely. Today the same color is sold in many tubes of paint, and few people realize that it once came from a journey across mountains and seas.

Questions

1. What does the name ultramarine mean?

_____

_____

2. What stone was used to make ultramarine paint?

_____

_____

3. Which part of the process separated the blue from the rest of the rock?

_____

_____

4. When did chemists find a way to make a similar pigment in a laboratory?

_____

_____

5. Why did artists save ultramarine for the most important subjects?

_____

_____

6. How did the laboratory version change painting?

_____

_____

Words to know

ultramarine: a deep blue color made from lapis lazuli
pigment: a colored powder used to make paint
scarce: hard to find and not available in large amounts
patron: a person who pays an artist to make a work
synthetic: made by people rather than found in nature

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: _____

The Blue That Once Cost More Than Gold

Square group

Examine the robes in many paintings from the Middle Ages and the Renaissance, and you will often notice a deep, luminous blue. That color was frequently ultramarine, and for centuries it ranked among the most precious materials an artist could purchase. Its name means "beyond the sea," because the raw material was transported by traders from distant mines in Afghanistan.

The source was a brilliant blue stone called lapis lazuli. Converting the stone into paint was a long and arduous process. The stone had to be ground into a fine powder and combined with wax, resin and oils to form a soft dough. This dough was then kneaded in a liquid solution, which gradually washed the pure blue particles out of the gray and white fragments of rock. The finest blue emerged first, and later batches were paler and considerably less expensive.

Because the labor was so demanding and the stone so scarce, the paint sometimes cost more than the value of the gold used on the same artwork. Patrons who commissioned a painting often specified the exact quantity of ultramarine in their contracts. Artists reserved it for the most important subjects, and they relied on cheaper blues for the sky and the background.

Everything changed in the early nineteenth century, when chemists discovered a way to manufacture a similar pigment in a laboratory. Synthetic ultramarine was far cheaper, and it allowed painters to use brilliant blue without restraint. Today the same color is sold in countless tubes of paint, and few people realize that it once arrived by way of a long journey across mountains and seas.

Questions

1. What does the name ultramarine mean?

_____

_____

2. What stone was used to produce ultramarine paint?

_____

_____

3. Which part of the process separated the blue from the rest of the rock?

_____

_____

4. When did chemists discover how to make a similar pigment in a laboratory?

_____

_____

5. Why did artists reserve ultramarine for the most important subjects?

_____

_____

6. How did the laboratory version transform painting?

_____

_____

Words to know

ultramarine: a deep blue color made from lapis lazuli
pigment: a colored powder used to make paint
scarce: hard to find and not available in large amounts
patron: a person who pays an artist to make a work
synthetic: made by people rather than found in nature

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: The Blue That Once Cost More Than Gold

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

Circle: The Blue That Once Cost More Than Gold

Easier · 223 words · Flesch-Kincaid grade 3.1

1. Beyond the sea.
2. Lapis lazuli.
3. Kneading the dough in a liquid.
4. In the early nineteenth century.
5. It was rare and costly, so they used cheaper blues for other parts.
6. It was much cheaper, so painters could use bright blue freely.

Triangle: The Blue That Once Cost More Than Gold

This passage · 263 words · Flesch-Kincaid grade 8.5

1. Beyond the sea.
2. Lapis lazuli.
3. Kneading the dough in a liquid solution washed out the pure blue particles.
4. In the early nineteenth century.
5. It was scarce and very costly, so they used cheaper blues for less important parts.
6. It was much cheaper, so painters could use brilliant blue freely.

Square: The Blue That Once Cost More Than Gold

Harder · 268 words · Flesch-Kincaid grade 10.2

1. Beyond the sea.
2. Lapis lazuli.
3. Kneading the dough in a liquid solution washed out the pure blue particles.
4. In the early nineteenth century.
5. It was scarce and very costly, so they relied on cheaper blues for less important parts.
6. It was far cheaper, so painters could use brilliant blue without restraint.