Name: _____ Date: _____

Rebuilding a Cracked Stained Glass Window

Circle group

A stained glass window looks like one picture. But it is made of many small pieces of colored glass. A thin strip of lead holds each piece in place. The strip is called came.

Sometimes a window cracks. Then a restorer comes to fix it. First, the restorer takes photos of the window. The restorer also lays paper on it and makes a rubbing of the lines. The rubbing shows where each piece goes.

Next, the window comes out and lies flat on a table. The restorer takes out the broken pieces and cleans the good ones. Then comes the hard part. The new glass must match the old glass in color and thickness. It must let in light the same way too. The restorer cuts it to fit the pattern and slides it between the lead strips.

At the joints, the restorer melts a little metal called solder. The solder holds the strips together. Last, soft putty goes into the edges to keep out wind and rain. If the job is done well, no one sees the repair.

Questions

1. What is came?

_____

_____

2. Why does the restorer make a rubbing?

_____

_____

3. What must new glass match?

_____

_____

4. What does the putty do at the end?

_____

_____

5. Why is matching the glass the hard part?

_____

_____

6. What does it mean if no one sees the repair?

_____

_____

Words to know

restorer: a person who repairs old things so they look like new
rubbing: a copy of a surface made by pressing paper over it
solder: melted metal used to join two pieces together
putty: a soft paste that hardens to seal a gap

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: _____

Rebuilding a Cracked Stained Glass Window

Triangle group

A stained glass window looks like a single picture, but it is really a puzzle of small colored pieces. Each piece is held in place by a thin strip of lead called came. When a window cracks or begins to sag, a restorer is called in to make it whole again.

The work starts with careful records. Before touching a single piece, the restorer photographs the window and lays paper over it to make a rubbing of every line. These records show where each piece belongs, so nothing is lost or misplaced during the repair.

Next, the window is taken out and laid flat on a table. The restorer removes the damaged pieces and cleans the ones that can be saved. Then comes the hardest part. A new piece of glass must match the old one in color, thickness, and even the way it lets in light. The restorer cuts it to the exact shape of the pattern, and fits it back between the lead strips.

At each joint where lead strips meet, the restorer melts a little metal called solder to hold them together. Finally, a soft putty is pressed into the edges to keep out wind and rain. If the job is done well, visitors never notice the repair at all.

Questions

1. What is came?

_____

_____

2. Why does the restorer make a rubbing before taking the window apart?

_____

_____

3. What must a new piece of glass match?

_____

_____

4. What is the putty used for at the end?

_____

_____

5. Why does the passage call the matching step the hardest part?

_____

_____

6. What does it mean if visitors never notice the repair?

_____

_____

Words to know

restorer: a person who repairs old things so they look like new
rubbing: a copy of a surface made by pressing paper over it
solder: melted metal used to join two pieces together
putty: a soft paste that hardens to seal a gap
sag: to sink or bend downward in the middle

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: _____

Rebuilding a Cracked Stained Glass Window

Square group

At first glance, a stained glass window looks like one unbroken picture, but it is actually an intricate puzzle of small colored pieces. Each piece is held in place by a slender strip of lead known as came. When a window cracks or starts to sag under its own weight, a restorer is summoned to make it whole once again.

The work begins with meticulous records. Before touching a single piece, the restorer photographs the window and lays paper across it to make a rubbing of every line. Those records reveal precisely where each piece belongs, so that nothing is lost or misplaced while the window is being repaired.

Afterward, the window is carefully removed and laid flat on a sturdy table. The restorer takes out the damaged pieces and cleans the ones that can be saved. Then comes the most demanding step. A replacement piece of glass must match the original in color and thickness, and even in the way it lets in light. The restorer cuts it to the exact outline of the pattern and fits it back between the lead strips.

At every joint where the strips meet, the restorer melts a small amount of metal called solder to fasten them securely. Finally, a soft putty is pressed into the edges to shut out wind and rain. When the work has been done well, visitors who admire the window will never even notice that it was repaired.

Questions

1. What is came, and what does it do?

_____

_____

2. Why does the restorer make a rubbing and take photographs first?

_____

_____

3. In which ways must a replacement piece of glass match the original?

_____

_____

4. What is the putty pressed into the edges for?

_____

_____

5. Why does the passage describe the matching step as the most demanding?

_____

_____

6. What does it suggest when visitors never notice the repair?

_____

_____

Words to know

restorer: a person who repairs old things so they look like new
rubbing: a copy of a surface made by pressing paper over it
solder: melted metal used to join two pieces together
putty: a soft paste that hardens to seal a gap
sag: to sink or bend downward in the middle

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: Rebuilding a Cracked Stained Glass Window

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

Circle: Rebuilding a Cracked Stained Glass Window

Easier · 179 words · Flesch-Kincaid grade 2.8

1. A thin strip of lead that holds the glass pieces.
2. The rubbing shows where each piece goes.
3. The old glass in color, thickness, and the way it lets in light.
4. It keeps out wind and rain.
5. The new glass has to look like the old glass in many ways at once.
6. The restorer did a very good job.

Triangle: Rebuilding a Cracked Stained Glass Window

This passage · 213 words · Flesch-Kincaid grade 6

1. A thin strip of lead that holds the pieces of glass in place.
2. The rubbing shows where each piece belongs.
3. The old glass in color, thickness, and the way it lets in light.
4. It keeps out wind and rain.
5. The new glass has to look just like the old glass, and many things must match at once.
6. The restorer did the job very well.

Square: Rebuilding a Cracked Stained Glass Window

Harder · 240 words · Flesch-Kincaid grade 8

1. A slender strip of lead that holds each piece of glass in place.
2. These records show exactly where each piece belongs so nothing is lost or misplaced.
3. In color, thickness, and the way it lets in light.
4. To shut out wind and rain.
5. The new glass has to resemble the old in several ways at the same time.
6. The restorer's work was done extremely well.