Name: _____ Date: _____

Odessa and the Last Face of the Cube

Circle group

Odessa's cousin could solve a puzzle cube faster than he could brush his teeth. When he left a spare cube at her house, she decided to learn too.

She twisted the cube for an hour and got one side right. Proud, she turned to the next side. The first side fell apart. She groaned. She fixed it again, and the same thing happened. Three days went by like that.

On the fourth day, Odessa had an idea. She stopped twisting at random. She wrote down each set of turns that worked. In her notebook she drew little arrows for each move. One page showed how to slide a piece into place without wrecking the rest. Another showed how to turn a corner piece.

Now when she made a mistake, she did not start over. She checked her notebook and tried other turns. The cube still fought her, but it began to lose.

After two weeks, Odessa sat on the porch with the cube. She twisted and twisted. Then she looked down. She saw six faces, and each was one bright color.

She did not break any records. She did not smile right away. She held the cube up to the light like a trophy and let out a long, happy breath.

Questions

1. Why did Odessa decide to learn to solve a cube?

_____

_____

2. What kept happening when Odessa fixed a second side?

_____

_____

3. What did Odessa write in her notebook?

_____

_____

4. How long did it take her to solve the cube?

_____

_____

5. Why did the notebook keep her from starting over after a mistake?

_____

_____

6. Why did Odessa hold up the cube like a trophy?

_____

_____

Words to know

random: done without any plan
corner: the place where two sides meet
wrecking: ruining or breaking apart
trophy: a prize you win to show you did well

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: _____

Odessa and the Last Face of the Cube

Triangle group

Odessa's cousin could solve a puzzle cube in less time than it took to brush his teeth. So when he left a spare cube at her house, she decided she would learn to do it too.

She twisted the cube for an hour and finished one side, and when she turned proudly to the next side, the first side fell to pieces. She groaned, finished that side again, and watched the same thing happen. Three days went by like that.

On the fourth day, Odessa had an idea. Instead of twisting at random, she wrote down every set of turns that seemed to work, and in her notebook she drew little arrows for each move. One page showed how to slide a piece into place without wrecking the rest, and another showed how to turn a corner piece.

Now when she made a mistake, she did not start over. She checked the notebook and tried a different set of turns. The cube still fought her, but it began to lose.

After two weeks, Odessa sat on the porch with the cube in her hands. She twisted and twisted. Then she looked down and saw six faces, each one a single, bright color.

She did not break any records. She did not even smile right away. She just held the cube up to the light, the way you might hold a trophy, and let out a long, happy breath.

Questions

1. Why did Odessa decide to learn how to solve a cube?

_____

_____

2. What kept happening when Odessa finished a second side?

_____

_____

3. What did Odessa write in her notebook?

_____

_____

4. How long did it take her to solve the cube?

_____

_____

5. Why did the notebook help her not start over after a mistake?

_____

_____

6. Why did Odessa hold up the cube like a trophy?

_____

_____

Words to know

random: done without any plan
corner: the place where two sides meet
wrecking: ruining or breaking apart
trophy: a prize you win to show you did well

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: _____

Odessa and the Last Face of the Cube

Square group

Odessa's cousin could solve a puzzle cube in less time than it took him to brush his teeth. So when he left a spare cube at her house after a visit, she resolved that she would learn to do it too.

She twisted the cube for an entire hour and managed to finish one side. Proud of herself, she turned to the next side, and the first side promptly fell to pieces. She groaned, finished that side again, and watched the same thing happen. Three days passed in exactly that way.

On the fourth day, Odessa had an idea. Instead of twisting at random, she began to record every set of turns that seemed to work. In her notebook she drew little arrows to show each move. One page explained how to slide a piece into place without wrecking everything around it, and another showed how to rotate a corner piece.

From then on, when she made a mistake, she did not start over from the beginning. She consulted her notebook and tried a different sequence of turns. The cube still fought her stubbornly, but it slowly began to lose.

After two weeks, Odessa sat on the porch with the cube in her hands, twisting and twisting. Then she looked down and saw six faces, each one a single, bright color.

She did not break any records, and she did not even smile right away. She simply held the cube up to the light, the way you might hold a trophy, and let out a long, happy breath.

Questions

1. Why did Odessa decide to learn how to solve a cube?

_____

_____

2. What kept happening when Odessa finished a second side?

_____

_____

3. What did Odessa record in her notebook?

_____

_____

4. How long did it take her to solve the cube?

_____

_____

5. Why did the notebook keep her from starting over after a mistake?

_____

_____

6. Why did Odessa hold the cube up like a trophy?

_____

_____

Words to know

random: done without any plan
corner: the place where two sides meet
wrecking: ruining or breaking apart
trophy: a prize you win to show you did well

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: Odessa and the Last Face of the Cube

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

Circle: Odessa and the Last Face of the Cube

Easier · 211 words · Flesch-Kincaid grade 2.1

1. Her cousin could solve one fast and left a spare.
2. The first side fell apart again.
3. Sets of turns that worked, with arrows for each move.
4. About two weeks.
5. She could check her notes and try other turns.
6. She was proud because she had worked hard to solve it.

Triangle: Odessa and the Last Face of the Cube

This passage · 238 words · Flesch-Kincaid grade 4.3

1. Her cousin could solve one very quickly and left a spare.
2. The first side fell to pieces again.
3. Sets of turns that worked, with arrows for each move.
4. About two weeks.
5. She could check her notes and try a different set of turns.
6. She was proud, because she had worked hard to solve it.

Square: Odessa and the Last Face of the Cube

Harder · 258 words · Flesch-Kincaid grade 5.6

1. Her cousin could solve one very quickly and left a spare behind.
2. The first side fell to pieces again.
3. Sets of turns that worked, with arrows showing each move.
4. About two weeks.
5. She could consult her notes and try a different sequence of turns.
6. She was proud, because she had worked hard to solve it.