Name: _____ Date: _____

A Butterfly's Matching Wings

Circle group

Look at a butterfly. Its left wing looks like its right wing. They have the same colors and spots. Draw a line down the middle. Both sides match.

Math has a word for this. The word is symmetry. A shape with symmetry has two sides that match.

Try it with paper. Fold the paper. Cut a heart on the fold. Open it up. Both sides match.

Questions

1. What do the two wings of a butterfly look like?

_____

_____

2. What is the math word for two sides that match?

_____

_____

3. What do you do to the paper before you cut it?

_____

_____

4. What shape do you cut on the fold?

_____

_____

5. Why do both sides of the paper heart match?

_____

_____

Words to know

symmetry: having two sides that match
wing: the part a butterfly uses to fly
fold: to bend paper so one part lies on another
match: to be the same as something else

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: _____

A Butterfly's Matching Wings

Triangle group

Look at a butterfly. Its left wing looks just like its right wing. They have the same colors and the same spots. If you drew a line down the middle, both sides would match.

Math has a word for this. The word is symmetry. A shape with symmetry has two sides that match.

You can try it with paper. Fold a sheet in half. Cut a heart shape on the fold. Open it up. Both sides of the heart match. A heart is a shape with symmetry.

Questions

1. What do the two wings of a butterfly look like?

_____

_____

2. What is the math word for two sides that match?

_____

_____

3. What do you do to the paper before you cut it?

_____

_____

4. What shape do you cut on the fold?

_____

_____

5. Why do both sides of the paper heart match?

_____

_____

Words to know

symmetry: having two sides that match
wing: the part a butterfly uses to fly
fold: to bend paper so one part lies on another
match: to be the same as something else

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: _____

A Butterfly's Matching Wings

Square group

Take a close look at a butterfly. Its left wing looks exactly like its right wing, with the same colors and the same spots. If you imagined a line down the middle, both sides would match perfectly.

Mathematicians have a word for this idea, and the word is symmetry. A shape that has symmetry has two sides that match each other.

You can try it yourself with a sheet of paper. Fold the sheet in half and cut half of a heart shape along the fold. When you open the paper, both sides of the heart match, so the heart is a shape with symmetry.

Questions

1. What do the two wings of a butterfly look like?

_____

_____

2. What is the math word for a shape with two sides that match?

_____

_____

3. What do you do to the sheet of paper before you cut?

_____

_____

4. What shape do you cut along the fold?

_____

_____

5. Why do both sides of the paper heart match after you open it?

_____

_____

Words to know

symmetry: having two sides that match

wing: the part a butterfly uses to fly

fold: to bend paper so one part lies on another
match: to be the same as something else

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: A Butterfly's Matching Wings

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

Circle: A Butterfly's Matching Wings

Easier · 66 words · Flesch-Kincaid grade 0.2

1. They look like each other.
2. Symmetry.
3. You fold it.
4. A heart.
5. You cut on the fold, so both sides are the same.

Triangle: A Butterfly's Matching Wings

This passage · 87 words · Flesch-Kincaid grade 0.5

1. They look just like each other.
2. Symmetry.
3. You fold it in half.
4. A heart.
5. You cut one fold, so each side is the same shape.

Square: A Butterfly's Matching Wings

Harder · 105 words · Flesch-Kincaid grade 4.5

1. They look exactly like each other.
2. Symmetry.
3. You fold it in half.
4. A heart.
5. You cut along one fold, so each side is the same shape.