Name: _____ Date: _____

When a River Cuts Off Its Own Loop

Circle group

Rivers rarely flow in straight lines. On flat land, a river bends back and forth in wide curves called meanders. Over time, the curves can change so much that part of the river is left behind as a curved lake.

It starts with moving water. On the outside of a bend, the water is faster. It cuts into the bank and carries soil away. On the inside of the bend, the water is slower, so it drops sand and mud. The outer bank wears back and the inner bank builds up. Each year the curve gets bigger.

After many years, the two ends of a loop may get close together. Only a thin strip of land, called a neck, is left. Then a flood comes. Fast water cuts across the neck, and the river takes a shorter path.

The old loop is cut off. Sand and mud pile up at its ends and seal it. What is left is a curved lake of still water called an oxbow lake. It is named for the U-shaped wooden collar once used on oxen.

Oxbow lakes are calm homes for fish, frogs, birds and plants. Over time, they fill with mud and plants and may become marshes or dry land.

Questions

1. What are the wide curves of a river called?

_____

_____

2. Is river water faster on the outside or inside of a bend?

_____

_____

3. What is the thin strip of land between two ends of a loop called?

_____

_____

4. How does a flood help make an oxbow lake?

_____

_____

5. Why is an oxbow lake made of still water?

_____

_____

6. What may happen to an oxbow lake over time?

_____

_____

Words to know

meander: a wide, winding curve in a river
bank: the sloping land along the side of a river
flood: a large amount of water covering normally dry land
seal: to close off tightly so nothing can pass through
marsh: soft, wet land with grasses and reeds

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: _____

When a River Cuts Off Its Own Loop

Triangle group

Rivers rarely flow in straight lines. Across flat land, a river usually bends back and forth in wide curves called meanders. Over time, these curves can change so much that a river leaves part of itself behind as a curved lake.

The change begins with moving water. On the outside of a bend, the water travels faster and cuts into the bank, carrying soil away. On the inside of the bend, the water is slower, so it drops sand and mud. The outer bank wears back while the inner bank builds up, and the curve becomes bigger and more bent each year.

After many years, the two ends of a loop may grow close together, leaving only a thin strip of land called a neck. Then a flood comes. Fast water cuts straight across the neck, and the river finds a shorter path.

The old loop is now cut off. Sand and mud pile up at its ends and seal it from the river. What remains is a curved body of still water called an oxbow lake, named for the U-shaped wooden collar once used on a team of oxen.

Oxbow lakes become calm homes for fish, frogs, birds and plants. In time, they slowly fill with mud and plants, and may turn into marshes or even dry land.

Questions

1. What are the wide curves of a river called?

_____

_____

2. Where does river water move faster, on the outside or the inside of a bend?

_____

_____

3. What is the thin strip of land between two ends of a loop called?

_____

_____

4. How does a flood help create an oxbow lake?

_____

_____

5. Why is an oxbow lake made of still water?

_____

_____

6. What may happen to an oxbow lake after a long time?

_____

_____

Words to know

meander: a wide, winding curve in a river
bank: the sloping land along the side of a river
flood: a large amount of water covering normally dry land
seal: to close off tightly so nothing can pass through
marsh: soft, wet land with grasses and reeds

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: _____

When a River Cuts Off Its Own Loop

Square group

Rivers seldom flow in straight lines. Across flat terrain, a river typically winds back and forth in broad curves known as meanders. Over the years, these curves can change so dramatically that a river abandons part of itself as a curved lake.

The transformation begins with moving water. On the outside of a bend, the current travels faster and gnaws at the bank, carrying soil away. On the inside of the bend, the current is slower, so it deposits sand and mud. The outer bank erodes while the inner bank builds up, and the curve grows larger and more pronounced each year.

After many years, the two ends of a loop may approach one another, leaving only a narrow strip of land called a neck. Then a flood arrives. Rushing water slices directly across the neck, and the river discovers a shorter route.

The old loop is now severed. Sand and mud accumulate at its ends and seal it off from the river. What remains is a curved body of still water called an oxbow lake, named after the U-shaped wooden collar that was once fitted on a team of oxen.

Oxbow lakes become tranquil habitats for fish, frogs, birds and plants. Eventually, they gradually fill with mud and vegetation, and may turn into marshes or even dry land.

Questions

1. What are the broad curves of a river called?

_____

_____

2. Where does river water travel faster, on the outside or the inside of a bend?

_____

_____

3. What name is given to the narrow strip of land between two ends of a loop?

_____

_____

4. How does a flood contribute to the creation of an oxbow lake?

_____

_____

5. Why does an oxbow lake consist of still water?

_____

_____

6. What may eventually happen to an oxbow lake?

_____

_____

Words to know

meander: a wide, winding curve in a river
bank: the sloping land along the side of a river
flood: a large amount of water covering normally dry land
seal: to close off tightly so nothing can pass through
marsh: soft, wet land with grasses and reeds

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: When a River Cuts Off Its Own Loop

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

Circle: When a River Cuts Off Its Own Loop

Easier · 208 words · Flesch-Kincaid grade 2.8

1. Meanders.
2. The outside of the bend.
3. A neck.
4. Fast water cuts across the neck, so the river takes a shorter path and leaves the loop.
5. Mud and sand seal its ends from the river.
6. It may fill with mud and plants and become a marsh or dry land.

Triangle: When a River Cuts Off Its Own Loop

This passage · 220 words · Flesch-Kincaid grade 4.9

1. Meanders.
2. The outside of the bend.
3. A neck.
4. Fast water cuts across the neck, so the river takes a shorter path and leaves the loop behind.
5. Mud and sand seal its ends off from the moving river.
6. It may fill with mud and plants and become a marsh or dry land.

Square: When a River Cuts Off Its Own Loop

Harder · 220 words · Flesch-Kincaid grade 6.9

1. Meanders.
2. On the outside of the bend.
3. A neck.
4. Rushing water slices across the neck, so the river takes a shorter route and leaves the loop.
5. Sand and mud seal its ends off from the moving river.
6. It may fill with mud and vegetation and turn into a marsh or dry land.