Name: _____ Date: _____

Fish Ladders: Stairs Built for Swimmers

Circle group

Some fish swim up rivers to lay their eggs in quiet places. A dam can stop them. The wall is too tall to leap over. The fish get stuck below it. Engineers made a fix. It is called a fish ladder.

A fish ladder is not a real ladder. It is a row of pools. Each pool is a bit higher than the last. It is like a staircase for swimmers. Water from above the dam flows down through the pools. Fish swim against the flow. They rest in a pool. Then they dart or leap into the next one. Step by step, they get past the dam.

Builders think about each kind of fish. Strong swimmers can take tall steps. Small fish need gentle steps. The entrance must be easy to find. It is put where the flowing water will draw the fish in. At some dams, a window lets workers count the fish. That shows if the ladder works.

Questions

1. Why do some fish swim up rivers?

_____

_____

2. What problem does a dam cause for these fish?

_____

_____

3. What is a fish ladder made of?

_____

_____

4. Which way does water flow in a fish ladder?

_____

_____

5. Why must builders think about each kind of fish?

_____

_____

6. Why is the entrance put where the water flows?

_____

Words to know

dam: a strong wall built across a river to hold back water
engineers: people who plan and design things to solve problems
pools: small areas of still water
dart: to move forward very quickly
entrance: the place where something is entered

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: _____

Fish Ladders: Stairs Built for Swimmers

Triangle group

Some fish must travel up rivers to reach the quiet places where they lay their eggs. A dam can stop them. A tall wall of concrete is too high to leap over, and the fish would be stuck below it. Engineers found a clever fix called a fish ladder.

A fish ladder is not really a ladder at all. It is a series of connected pools, each one a bit higher than the last, like a staircase for swimmers. Water from above the dam flows down through the pools. Fish swim against that flow, rest in a pool, and then dart or leap through a gap into the next one. Step by step, they climb past the dam.

Builders have to think about each kind of fish. Strong swimmers can handle tall steps, while smaller fish need gentler ones. The entrance must be easy to find, so it is placed where the flowing water will draw the fish in. At some dams, a viewing window lets workers watch and count the fish passing by, which tells them whether the ladder is working well.

Questions

1. Why do some fish need to travel up rivers?

_____

_____

2. What problem does a dam cause for these fish?

_____

_____

3. What is a fish ladder made of?

_____

_____

4. Which way does the water flow through a fish ladder?

_____

_____

5. Why must builders think about each kind of fish?

_____

_____

6. Why is the entrance placed where the water flows?

_____

_____

Words to know

dam: a strong wall built across a river to hold back water
engineers: people who plan and design things to solve problems
pools: small areas of still water
dart: to move forward very quickly
entrance: the place where something is entered

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: _____

Fish Ladders: Stairs Built for Swimmers

Square group

Certain fish must journey up rivers to reach the quiet places where they lay their eggs, and a dam can block their way entirely. A tall wall of concrete is far too high for them to leap over, so the fish would remain stranded below it. To solve this problem, engineers developed a clever structure known as a fish ladder.

A fish ladder is not really a ladder at all. It is a series of connected pools, each one slightly higher than the one before, much like a staircase designed for swimmers. Water from above the dam flows down through the pools, and the fish swim against that current, rest in a pool, and then dart or leap through a gap into the next. Step by step, they climb their way past the dam.

Builders have to consider the needs of each kind of fish. Strong swimmers can manage tall steps, whereas smaller fish require gentler ones. The entrance must also be easy to locate, so it is placed where the flowing water will draw the fish toward it. At some dams, a viewing window allows workers to watch and count the fish as they pass, which reveals whether the ladder is doing its job well.

Questions

1. Why do certain fish have to journey up rivers?

_____

_____

2. What problem does a dam cause for these fish?

_____

_____

3. What is a fish ladder made of?

_____

_____

4. Which way does the water flow through a fish ladder?

_____

_____

5. Why must builders consider the needs of each kind of fish?

_____

_____

6. Why is the entrance placed where the water is flowing?

_____

_____

Words to know

dam: a strong wall built across a river to hold back water
engineers: people who plan and design things to solve problems
pools: small areas of still water
dart: to move forward very quickly
entrance: the place where something is entered

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: Fish Ladders: Stairs Built for Swimmers

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

Circle: Fish Ladders: Stairs Built for Swimmers

Easier · 161 words · Flesch-Kincaid grade 1.1

1. To lay their eggs in quiet places.
2. The wall is too tall to leap over, so they get stuck below it.
3. A row of pools, each one a bit higher than the last.
4. Down through the pools, so the fish swim against it.
5. Strong swimmers can take tall steps, but small fish need gentle ones.
6. Fish follow the flowing water, so it draws them to the entrance.

Triangle: Fish Ladders: Stairs Built for Swimmers

This passage · 183 words · Flesch-Kincaid grade 4.4

1. To reach quiet places where they lay their eggs.
2. The wall is too high to leap over, so the fish get stuck below it.
3. A series of connected pools, each one a bit higher than the last.
4. Down through the pools, so the fish swim against it.
5. Strong swimmers can handle tall steps, but smaller fish need gentler ones.
6. Fish follow the flowing water, so it draws them to the entrance.

Square: Fish Ladders: Stairs Built for Swimmers

Harder · 206 words · Flesch-Kincaid grade 7

1. To reach the quiet places where they lay their eggs.
2. The wall is too high to leap over, so the fish remain stranded below it.
3. A series of connected pools, each one slightly higher than the one before.
4. Down through the pools, so the fish swim against the current.
5. Strong swimmers can manage tall steps, but smaller fish require gentler ones.
6. Fish follow the flowing water, so it draws them toward the entrance.