Name: _____ Date: _____

How a Water Strider Walks on a Pond

Circle group

On a calm pond in summer, you may see a small insect glide across the water. It does not swim. It does not sink. It is a water strider. It walks on the surface like the pond is a floor.

The secret starts with water itself. The tiny bits in water pull on one another. At the top, they pull on their neighbors and make a thin, stretchy skin. Scientists call this surface tension. It is not strong. But it can hold up something very light.

A water strider has long, thin legs. They spread its weight over a wide area. Its legs also have tiny hairs that push water away. So its feet press little dents in the top but do not break through. The insect rows with its middle legs and steers with its back legs.

Surface tension also makes water form round beads on a waxy leaf. Next time you see a drop on a leaf, think of the strider and the skin of the pond.

Questions

1. Where does a water strider walk?

_____

_____

2. What is surface tension?

_____

_____

3. How do the long legs help the insect?

_____

_____

4. What do the tiny hairs on its legs do?

_____

_____

5. Why do its feet make dents but not break through?

_____

_____

6. How is a drop on a waxy leaf like the strider's pond?

_____

_____

Words to know

strider: an insect that walks or glides on top of water
surface: the outside or top layer of something
tension: a pulling force that holds something tight
steer: to guide which way something goes

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: _____

How a Water Strider Walks on a Pond

Triangle group

On a calm pond in summer, you might spot a small insect gliding across the top of the water. It does not swim. It does not sink. It is a water strider, and it walks on the surface as if the pond were a floor.

The secret begins with water itself. The tiny bits that make up water are pulled toward one another. At the surface, those bits pull on their neighbors and form a thin, stretchy skin. Scientists call this surface tension. It is not strong, but it is enough to hold up something very light.

A water strider has long, thin legs that spread its weight over a wide area. Its legs are also covered with tiny hairs that push water away. Because of this, its feet press little dents into the surface but do not break through. The insect can row across the pond with its middle legs and steer with its back legs.

Surface tension also explains why water makes round beads on a waxy leaf. Next time you see a drop on a leaf, think of the strider and the thin skin of the pond.

Questions

1. Where does a water strider walk?

_____

_____

2. What is surface tension?

_____

_____

3. How do the long legs help the insect?

_____

_____

4. What do the tiny hairs on its legs do?

_____

_____

5. Why does the strider's foot make a dent but not break through?

_____

_____

6. How is a drop of water on a waxy leaf like the water strider's pond?

_____

_____

Words to know

strider: an insect that walks or glides on top of water
surface: the outside or top layer of something
tension: a pulling force that holds something tight
steer: to guide which way something goes

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: _____

How a Water Strider Walks on a Pond

Square group

On a calm pond in the middle of summer, you might notice a small insect gliding effortlessly across the top of the water. It is neither swimming nor sinking. It is a water strider, and it walks on the surface as though the pond were a solid floor.

The secret begins with water itself. The tiny particles that make up water are drawn toward one another, and at the surface they pull on their neighbors to form a thin, stretchy skin. Scientists refer to this as surface tension. It is not strong, but it is sufficient to support something extremely light.

A water strider has long, slender legs that distribute its weight over a wide area, and those legs are covered with tiny hairs that repel water. As a result, its feet press shallow dents into the surface without breaking through. The insect rows itself across the pond with its middle legs and steers with its back legs.

Surface tension also explains why water forms round beads on a waxy leaf. The next time you notice a droplet on a leaf, think of the strider and the delicate skin of the pond.

Questions

1. Where does a water strider walk?

_____

_____

2. What is surface tension?

_____

_____

3. How do the long, slender legs help the insect?

_____

_____

4. What do the tiny hairs on its legs do?

_____

_____

5. Why do the insect's feet press dents without breaking through?

_____

_____

6. How is a droplet on a waxy leaf connected to the strider's pond?

_____

_____

Words to know

strider: an insect that walks or glides on top of water
surface: the outside or top layer of something
tension: a pulling force that holds something tight
steer: to guide which way something goes

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: How a Water Strider Walks on a Pond

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

Circle: How a Water Strider Walks on a Pond

Easier · 169 words · Flesch-Kincaid grade 2.6

1. On the surface of a pond.
2. The thin, stretchy skin at the top of water, made because its tiny bits pull on each other.
3. They spread its weight over a wide area.
4. They push water away.
5. The skin on the water can hold up something very light.
6. Both show surface tension, which holds water in a skin or a round bead.

Triangle: How a Water Strider Walks on a Pond

This passage · 190 words · Flesch-Kincaid grade 4.3

1. On the surface of a pond.
2. The thin, stretchy skin that forms at the top of water because its tiny bits pull on each other.
3. They spread its weight over a wide area.
4. They push water away.
5. The surface skin is strong enough to hold something very light.
6. Both show surface tension, which makes the water hold together in a skin or a round bead.

Square: How a Water Strider Walks on a Pond

Harder · 192 words · Flesch-Kincaid grade 7.1

1. On the surface of a pond.
2. The thin, stretchy skin that forms at the surface of water because its tiny particles pull on each other.
3. They distribute its weight over a wide area.
4. They repel water.
5. The skin on the water is strong enough to support something extremely light.
6. Both show surface tension, which holds water together in a skin or a round bead.