Name: _____ Date: _____

Ice Cube Race: Sun Against Shade

Circle group

Here is a race with no running. Two ice cubes race to melt. Which one wins?

Put one ice cube on a plate in the sun. Put one on a plate in the shade. Make the cubes the same size. Then the race is fair.

Wait and watch. The cube in the sun melts fast. A puddle grows. The cube in the shade melts slowly.

The sun gives off heat. Heat is energy that makes things warm. Heat goes into the ice. The ice turns to water. The sun has more heat, so it wins.

Questions

1. Where do you put the ice cubes?

_____

_____

2. Why are the cubes the same size?

_____

_____

3. Which cube melts faster?

_____

_____

4. What does heat do to ice?

_____

_____

5. Will a snowman melt slower in the shade or in the sun?

_____

_____

Words to know

melt: to change from ice into water as it gets warmer
shade: a spot where something blocks the sun
energy: the power that makes things move or change

puddle: a small pool of water

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: _____

Ice Cube Race: Sun Against Shade

Triangle group

Here is a race with no running. Two ice cubes will race to melt. Which one will win?

Put one ice cube on a plate in a sunny spot outside. Put the other ice cube on a matching plate in the shade. Make sure the two cubes are the same size. That makes the race fair.

Now wait and watch. The cube in the sun gets smaller fast. Its edges turn round and a puddle grows. The cube in the shade melts too, but slowly.

The sun gives off heat. Heat is a kind of energy that makes things warmer. Heat moves into the ice, and the ice turns into water. Sunny spots get more heat, so the sun cube wins the race.

Questions

1. Where do you put the two ice cubes?

_____

_____

2. Why should the two cubes be the same size?

_____

_____

3. Which cube melts faster?

_____

_____

4. What does heat do to ice?

_____

_____

5. A snowman stands in the shade of a tree. Will it melt faster or slower than one in the sun?

_____

_____

Words to know

melt: to change from ice into water as it gets warmer
shade: a spot where something blocks the sun
energy: the power that makes things move or change
puddle: a small pool of water

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: _____

Ice Cube Race: Sun Against Shade

Square group

Here is a race that requires no running at all. Two ice cubes will compete to see which one melts first. Which will win?

Place one ice cube on a plate in a sunny spot outdoors, and place the other on an identical plate in the shade. Be sure the two cubes are exactly the same size, so that the race is fair.

Now wait and watch carefully. The cube in the sun shrinks quickly, its edges turn round, and a puddle spreads beneath it. The cube in the shade melts as well, but much more slowly.

The sun gives off heat, a kind of energy that makes things warmer. Heat flows into the ice and turns it into water. Sunny spots receive more heat, so the cube in the sun wins the race.

Questions

1. Where should you place the two ice cubes?

_____

_____

2. Why must the two cubes be the same size?

_____

_____

3. Which cube melts more quickly?

_____

_____

4. What does heat do to ice?

_____

_____

5. Would a snowman in the shade of a tree melt faster or slower than one in the sun?

_____

_____

Words to know

melt: to change from ice into water as it gets warmer
shade: a spot where something blocks the sun
energy: the power that makes things move or change
puddle: a small pool of water

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: Ice Cube Race: Sun Against Shade

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

Circle: Ice Cube Race: Sun Against Shade

Easier · 95 words · Flesch-Kincaid grade -0.6

1. One in the sun and one in the shade.
2. It makes the race fair.
3. The cube in the sun.
4. It turns the ice into water.
5. Slower in the shade, because there is less heat.

Triangle: Ice Cube Race: Sun Against Shade

This passage · 123 words · Flesch-Kincaid grade 0.9

1. One in the sun and one in the shade.
2. It makes the race fair.
3. The one in the sun.
4. It turns the ice into water.
5. Slower, because the shade gets less heat.

Square: Ice Cube Race: Sun Against Shade

Harder · 134 words · Flesch-Kincaid grade 3.3

1. One in a sunny spot and one in the shade.
2. That makes the race fair.
3. The cube in the sun.
4. It turns the ice into water.
5. Slower, because the shade receives less heat.