Name: _____ Date: _____

Kelp, the Forest Under the Waves

Circle group

Off some cool, rocky coasts, forests grow under the sea. They are made of kelp, a very large seaweed. Kelp looks like a plant, but scientists place it in a different group called algae. Like plants, it makes its own food from sunlight.

Kelp has no true roots. It holds on to the sea floor with a grippy tangle called a holdfast. The holdfast does not take in food. Its only job is to keep the kelp from drifting away. Long stalks rise from it toward the top of the water. Each stalk has wide, ribbon-like blades. Small bladders filled with gas help hold the blades up near the top, where they can soak up sunlight.

A kelp forest is a busy home. Fish swim among the stalks. Snails crawl on the blades. Crabs hide near the bottom. Sea otters sometimes wrap themselves in kelp so they do not float away while they rest.

People use kelp, too. A substance from it thickens foods such as ice cream and salad dressing. Some kinds of kelp are eaten as a vegetable.

Kelp grows quickly, so it can recover fast. It still needs clean, cool water.

Questions

1. What group do scientists place kelp in?

_____

_____

2. What is the job of the holdfast?

_____

_____

3. How do the gas bladders help the kelp?

_____

_____

4. Which two animals live in or use a kelp forest?

_____

_____

5. How do people use kelp?

_____

_____

6. Why does kelp need to stay near the top of the water?

_____

_____

Words to know

kelp: a very large kind of seaweed that grows in cool water
algae: plantlike living things that grow in water
holdfast: the grippy part that anchors kelp to the sea floor
stalks: long, thin stems
bladders: small sacs that hold gas

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: _____

Kelp, the Forest Under the Waves

Triangle group

Off some cool, rocky coasts, there are forests that grow under the sea. They are made of kelp, a very large kind of seaweed. Kelp looks like a plant, but scientists place it in a different group called algae. Like plants, it makes its own food using sunlight.

Kelp has no true roots. Instead, it holds fast to the sea floor with a tangle of grippy parts called a holdfast. The holdfast does not take in food. Its only job is to keep the kelp from drifting away. Long stalks rise from it toward the surface, and each stalk has wide, ribbon-like blades. Small bladders filled with gas help hold the blades up so they can soak up sunlight near the top.

A kelp forest is a busy home. Fish swim among the stalks, snails crawl on the blades, and crabs hide near the bottom. Sea otters sometimes wrap themselves in kelp so they do not float away while they rest.

People use kelp, too. A substance taken from it is used to thicken foods such as ice cream and salad dressing. Some kinds of kelp can also be eaten as a vegetable.

Because it grows so quickly, kelp can recover fast, but it still needs clean, cool water to thrive.

Questions

1. What group do scientists place kelp in?

_____

_____

2. What is the job of the holdfast?

_____

_____

3. How do the gas bladders help the kelp?

_____

_____

4. Which two animals live in or use a kelp forest?

_____

_____

5. How do people use kelp?

_____

_____

6. Why does kelp need to stay near the surface?

_____

_____

Words to know

kelp: a very large kind of seaweed that grows in cool water
algae: plantlike living things that grow in water
holdfast: the grippy part that anchors kelp to the sea floor
stalks: long, thin stems
bladders: small sacs that hold gas

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: _____

Kelp, the Forest Under the Waves

Square group

Along certain cool, rocky coastlines, entire forests flourish beneath the waves. These forests consist of kelp, an enormous kind of seaweed. Although kelp resembles a plant, scientists classify it in a separate group known as algae. Like plants, however, it produces its own food using sunlight.

Kelp lacks true roots. Instead, it clings to the sea floor with a grippy tangle called a holdfast, which does not absorb nourishment and exists solely to prevent the kelp from drifting away. Long stalks rise from the holdfast toward the surface, and each stalk bears wide, ribbon-like blades. Small bladders filled with gas keep the blades buoyant near the top, where they can capture sunlight.

A kelp forest is a bustling habitat. Fish weave among the stalks, snails creep along the blades, and crabs shelter near the bottom. Sea otters occasionally wrap themselves in kelp so that they do not float away while they rest.

People depend on kelp as well. A substance extracted from it is used to thicken foods such as ice cream and salad dressing, and certain kinds of kelp can be eaten as a vegetable.

Because kelp grows so rapidly, it can recover quickly from damage, but it still requires clean, cool water in order to thrive.

Questions

1. In which group do scientists classify kelp?

_____

_____

2. What is the sole purpose of the holdfast?

_____

_____

3. How do the gas-filled bladders help the kelp?

_____

_____

4. Which two animals live in or use a kelp forest?

_____

_____

5. In what ways do people use kelp?

_____

_____

6. Why must kelp remain near the surface?

_____

_____

Words to know

kelp: a very large kind of seaweed that grows in cool water
algae: plantlike living things that grow in water
holdfast: the grippy part that anchors kelp to the sea floor
stalks: long, thin stems
bladders: small sacs that hold gas

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: Kelp, the Forest Under the Waves

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

Circle: Kelp, the Forest Under the Waves

Easier · 195 words · Flesch-Kincaid grade 2.6

1. A group called algae.
2. To hold the kelp to the sea floor so it does not drift away.
3. They hold the blades up near the top, where they can soak up sunlight.
4. Any two of fish, snails, crabs, or sea otters.
5. A substance from it thickens foods, and some kinds are eaten as a vegetable.
6. It makes its own food from sunlight.

Triangle: Kelp, the Forest Under the Waves

This passage · 212 words · Flesch-Kincaid grade 3.9

1. A group called algae.
2. To hold the kelp to the sea floor so it does not drift away.
3. They hold the blades up near the top, where they can soak up sunlight.
4. Any two of fish, snails, crabs, or sea otters.
5. A substance from it thickens foods, and some kinds are eaten as a vegetable.
6. It makes its own food using sunlight.

Square: Kelp, the Forest Under the Waves

Harder · 209 words · Flesch-Kincaid grade 7.1

1. A group known as algae.
2. To anchor the kelp to the sea floor so it does not drift away.
3. They keep the blades buoyant near the top, where they can capture sunlight.
4. Any two of fish, snails, crabs, or sea otters.
5. A substance from it thickens foods, and certain kinds are eaten as a vegetable.
6. It produces its own food using sunlight.