








Why It's So Hard To Make Plastic-Free Running Shoes



A. Thinking Questions:

1. What types of shoes do you like to wear?
2. Do you and your friends wear shoes that are made of plant materials?
3. Why is it important for companies to use sustainable resources to make shoes?

B. Word Definition: Connect the word with its correct meaning:

Algae		Can withstand pressure or damage
Marathon		Someone good at sports
Durable		Aquatic plants eg. seaweed
Lifecycle		A long-distance race
Landfill		Something that can stretch
Elastic		Stages of change through time
Athlete		A place to dispose of waste

C. Video Questions: These questions test your understanding of the video.

1. How much does an average person spend on a pair of running shoes? \$100-250.
2. How many miles does a typical pair of running shoes last? 150 to 300 miles.
3. What are running shoes typically made of? Plastic
4. Why is it more difficult to make running shoes out of plant-based material?
Not all plant-based materials can withstand the impact of walking and running.
5. According to researchers, what do people look for in a pair of good running shoes?
People like lightweight shoes that have a snug fit, and has a large heel.

D. Advanced Questions: These questions make you think harder or apply what you know.

1. Manufacturers have tried to make shoes out of what types of plants?
Companies have used corn and mushrooms, but both materials were not durable enough.
2. What types of plants does Reebok use to make its running shoe?
The eucalyptus tree bark is refined into yarn to make the upper mesh of the shoe. The algae are melted down to create the sock liner. Castor beans are turned into oil to make the midsole.
3. How do shoe companies test new shoes?
Companies send prototype shoes to athletes to test and request feedback. They also put them on a machine that simulates walking, which helps check whether they can withstand repetitive movements.
4. What are some difficulties in using plants to make shoes?
Using plant-based materials can be very expensive. Currently, there is also limited availability of these materials, so sourcing them is a challenge for large scale production.