

49 Faster Than the Speed of Sound

The ace test pilot Chuck Yeager wanted to prove that a streamlined jet could fly faster than the speed of sound. People once thought an invisible barrier kept planes from flying that fast. Each time test pilots tried to reach the speed of sound, their jets began to rattle and shake. As they flew faster, the shaking became uncontrollable and caused many to crash. Some of them claimed that the "sound barrier" could not be broken. Chuck Yeager said it could, but that only a jet with the right shape could do it.

On the day Chuck Yeager broke the sound barrier, he flew over the desert in an orange rocket plane shaped like a bullet. The jet rattled as it neared the speed of sound, but then it suddenly smoothed out as it sped even faster. People watching on the ground heard a loud *boom* and feared that Chuck's jet had blown up. But when they saw the jet still streaking across the sky, they knew he had set the speed record.

From what you pictured...

What is the main idea of this story?

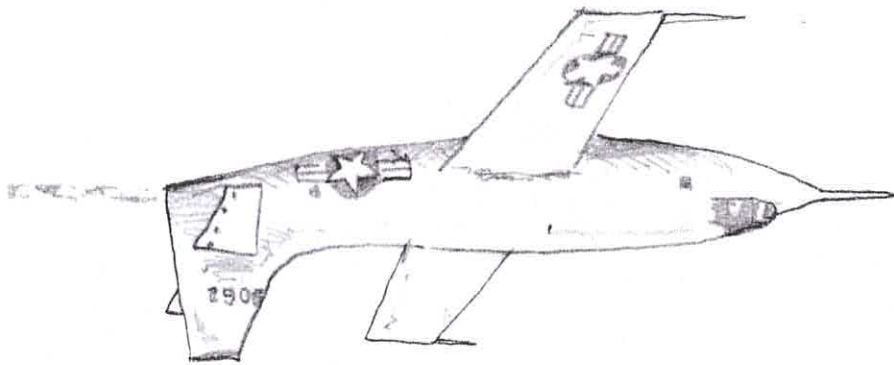
Why do you think Chuck Yeager was able to fly faster than the speed of sound before anyone else?

Why do you think the people thought Chuck's plane had blown up? The boom that the people heard is called a *sonic boom*. What do you think made the sonic boom?

Why do you think it was important for Chuck to fly a *rocket plane*? Why not just a plane with a propeller?

Why do you think Chuck's jet was painted orange and not gray or blue?

Why do you think the pilots trying to reach the speed of sound were called *test pilots*?



46 Spider Nets

The silk web spun by the Nephila spider is so strong that natives on one tropical island use it as a fishing net. To make one of these nets, a man first takes a long stick to a jungle clearing. There he bends the stick and pokes both ends into the ground. This makes a hoop that he leaves there for a week. When he comes back, he finds a clear, sticky web stretched across the hoop, and a spider as big as his hand sitting on it. He gently knocks the spider off with a short stick and takes his new net down to the beach.

To fish with the net, the man paddles his canoe out in the clear water. When he spots a school of fish, he dips his net into the sea. He leans out from the boat and quickly sweeps the net through the school. Most of the fish scatter, but a few get snagged as the man lifts the net from the water. He plucks the fish out of the web's strands, tosses them in the bottom of the boat, and paddles on, looking for more fish.

From what you pictured...

What is the main idea of this story?

Why do you think the web of the Nephila spider makes a good fishing net?

Do you think it is good for the spider to have such a strong web? Why or why not?

Why do you think he came back to his hoop a week later? Why not the next day?

Why do you think he knocks the spider off *gently*? Why not just kill it?

Why do you think the man sweeps the net *quickly* through the school? What do you think would happen if he were too slow?

47 Walt's Disneyland

Walt Disney built a small railroad in his backyard. For fun, he took his young daughters and their friends for rides on the train. The smiling children sat atop the mini cars while Walt sat on the shiny black engine. The train traveled along steel tracks that looped around the grassy yard. It also passed through a long dark tunnel that ran beneath a large flowerbed.

Soon after, Walt built a large park full of fun rides for both children and their parents. Workers cut down a giant grove of orange trees to make room for the rides. Then they built a snow-capped mountain and a tall pink castle. They built large spinning teacups and a colorful carousel. Close by, a large wooden paddleboat slowly floated along a small river. The workers laid steel tracks around the perimeter of the park, and a passenger train rode on these tracks.

One year later, Walt opened his park, named Disneyland, to the public. Despite the summer heat, thousands of people flooded the park on opening day. News crews interviewed Walt. TV cameras filmed excited children and parents enjoying the rides. At the end of the day, the guests relaxed on the train as it took them around the park. Today, millions of people from around the world visit Disneyland.

From what you pictured...

What is the main idea of this story?

Why do you think Walt built a park for children *and* their parents?

Why do you think Walt named the park "Disneyland"?

Why do you think Walt included a train in his park?

Why do you think people flooded the park on opening day despite the summer heat?

Why do you think Disneyland is still a popular park?

46 The Flying Biker

Evel Knievel performed wild stunts on his dirt bike. Dressed in a red, white, and blue jumpsuit, he sat on his bike and revved its engine before speeding up a tall ramp. An awestruck crowd watched Knievel launch off the ramp and sail over nineteen cars parked side by side. During one attempt to jump a long row of cars, Knievel's back tire hit the last car, flipping Knievel and the bike. The crowd gasped in horror as he slammed into the ground. He broke many bones in the crash and stayed in the hospital for weeks. Once he healed, Knievel hopped back on his bike and resumed his crazy stunts.

For his biggest stunt, Knievel tried to ride a rocket-powered bike across a wide canyon. A tall ramp sat at the edge of a steep cliff above the canyon. With a big crowd watching, Knievel raced his bike up the ramp. Suddenly a parachute attached to the bike opened by mistake and slowed the bike before it launched off the edge. Knievel rode the bike a few feet off the ramp before falling into the canyon below. The chute slowed his fall, but he slammed into the cliff on the way down before landing at the edge of a river. Amazingly, Knievel survived the fall with only a few bumps and bruises.

From what you pictured...

What is the main idea of this story?

Why do you think Knievel jumped over cars?

Why do you think the crowd was awestruck?

Do you think Knievel was scared to ride again after the first crash?

How do you think Knievel felt once he landed on the canyon floor? Explain.

Why do you think he used a *rocket-powered* bike to attempt the jump across the canyon?

Why do you think the motorcycle had a parachute attached to it?

46 A Clogged-Up Reef

PARAGRAPH BY PARAGRAPH

One kind of algae is killing coral reefs off the coast of Hawaii. Spiny clumps of the brown algae build up on a colorful reef. They engulf the reef, growing up to two feet thick. Many algae clog the little nooks and crannies in the reef where fish once lived. The algae also cover sea anemones and plants that live on the reef, killing them. The algae block the sunlight from reaching the reef, which turns gray and dies.

A scuba diver uses a vacuum called the *super sucker* to clear the algae off the reef. Holding a 100-foot-long hose, the diver jumps off a large barge into the sea. She swims down to the algae-covered coral and breaks off big clumps of the algae by hand. She shakes the clumps to free any shellfish trapped inside them. Then she feeds the algae into the sucking hose. A strong vacuum on the barge pulls the algae up the hose. The diver slowly cleans off the whole reef, allowing the coral to receive the sunlight it needs.

From what you pictured...

What is the main idea of this story?

What do you think happens to the fish that lived on the reef once the algae clogs it?

What might happen if the diver does not clean the algae off the coral?

Why do you think the diver breaks the chunks of algae off *by hand* before feeding them into the hose?

Why do you think the vacuum is called the *super sucker*?

48 **Monkey Assistant**

A woman raised a baby capuchin monkey in her home. The monkey wore a diaper, which the woman changed when it was dirty. She placed a big cage in her living room for the monkey to sleep in at night. During the day, the monkey left the cage to run around and explore the house. The woman brushed the monkey's hair and filed his nails. After six years, the woman gave the monkey to a group called Helping Hands, which trains monkeys to help disabled people.

At the Helping Hands Monkey College, a trainer taught the monkey to perform everyday tasks. For one task, the trainer walked with the monkey into a kitchen. The trainer shone a small red laser on a cupboard hanging on the wall. The monkey learned to jump onto a counter, open the cupboard, and take out a bag of popcorn. Then the trainer shone the laser on a microwave. The monkey learned to open the microwave door, put the bag inside, and cook it. Each time the monkey performed a task, the trainer petted him and gave him a small treat.

Today, the monkey lives with a paralyzed man in a wheelchair. The man holds a laser pointer in his mouth and shines it on the stereo in his living room. The monkey dashes over to the stereo, inserts a CD, and presses the play button. Next the man points the laser at the fridge. The monkey opens the fridge, takes out a bottle of water with a long straw in it, and places it on a tray in front of the man. The monkey also grooms the man's hair with his little hands and places a hat on the man's head. The man rubs his cheek against the monkey's head in thanks.

From what you pictured...

What is the main idea of this story?

Why do you think the woman brushed the monkey's hair and filed his nails?

Why do you think Helping Hands calls their training program *Monkey College*?

Why do you think the trainer uses a *laser* to teach the monkey everyday tasks?

How do you think the paralyzed man feels about his monkey assistant? Why do you think Helping Hands trains monkeys? Why not some other animal?