

SKIM AND SCOOP: PASSAGE 1

Main Idea:

Elephants are huge! They are the largest land animal alive on Earth, standing at over 10 feet tall and weighing up to 5,000 pounds. They have large skulls, large teeth (known as tusks), and a really long nose called a trunk. Elephants have the biggest babies, too. A newborn elephant is 250 pounds when it is born.

The elephant's trunk is amazing. Elephants use their trunks to do almost everything. They use their trunks for breathing, smelling, making sounds, touching objects, or picking them up. There are 150,000 muscles in the trunk, making it very flexible and strong. Elephants can use their trunk for delicate tasks, like wiping their eyes, and strong tasks, like lifting over 800 pounds.

An elephant's trumpet is legendary, but that is only one way that elephants can communicate with each other. They talk to each other through nonverbal means, such as a gentle touch with a trunk or a strong push with tusks. Elephants can also produce an amazing range of vocal noises. They are capable of making sounds so low that humans cannot hear them. They are even able to sense vibrations in the ground. With this ability, they can tell when their family is in danger, even at distances of 20 miles.

Even though elephants are amazing creatures, they may not be around for long. The number of elephants is shrinking every day. In the past 40 years, the number of elephants in Africa has shrunk from 1.3 million to 440,000. Elephants in Asia are also disappearing. There are only 50,000 elephants left in Asia. Loss of habitat and poaching are the two main reasons that elephant populations are dying out. Hopefully, people will learn how to protect the elephant because they are amazing animals.

SKIM AND SCOOP: PASSAGE 2

Main Idea:

Hidden in the rainforest of tropical Mexico and Guatemala, you can still find ruins of huge cities, remnants of the classical Mayan civilization. Living in the rainforest was only one of the things that made the Mayans mysterious. Most large and sophisticated civilizations are found in drier and more temperate settings; however, the Mayans thrived in the dense jungle. The rainforest provided limestone for building their cities, as well as crops such as corn, beans, squash, cassava, chili peppers, tropical fruits, and even chocolate.

The ruins of Mayan cities can be found in southern Mexico, as well as Guatemala and Belize. These cities were quite large. Tikal, for example, was home to a population of 60,000 people and contained almost 3,000 individual buildings, making it more densely populated than European cities of the time. Mayan cities were built around large stepped pyramids, which served as the ritual center of the city. Cities could also contain many palaces, water reservoirs, and even ball courts where Mayans would play a game similar to soccer or basketball.

The Mayans were also a scientifically advanced civilization. They developed a unique mathematical system based on the number 20, and they were one of the first cultures to mathematically understand the concept of zero. Though their number system did not have multiplication, division, or fractions, the Mayans were able to make impressive scientific observations of the stars and an amazingly accurate calendar. Mayan medicine was very sophisticated; they knew how to perform surgery and make prosthetic limbs and could make countless drugs from over 1,500 kinds of plants.

Unfortunately, most of this knowledge has been lost today. The disappearance of classical Mayan civilization is the greatest mystery of all. Around 900 AD, Mayan civilization began to decline. Their large cities were abandoned and melted into the jungle. No one is sure what happened. Some suspect that war wiped out the Maya, while others suspect that drought or environmental damage led to the breakdown of Mayan civilization. It is important to remember, however, that the Mayan people did not completely disappear. Even today, many people in Guatemala, Belize, or Southern Mexico speak various forms of Mayan language and carry on the Mayan tradition.

SKIM AND SCOOP: PASSAGE 3

Main Idea:

The engine that powers a car is one of the most amazing machines we use on a daily basis, yet many people do not know how it works. A car's engine is powered by internal combustion. Combustion is a word that means burning. In a car, the engine burns gas in small chambers called cylinders. The energy released by the combusting gas allows the car to move.

The amount of power engines can produce is measured in horsepower. One horsepower is equal to the estimated amount of work an average horse can do in a minute. The engine in an average four-door car has approximately 130 horsepower. A sports car, built to go extremely fast, needs more power. Some Corvettes have engines with more than 600 horsepower. Car engines are not the only things with horsepower; the engines in lawn mowers and vacuum cleaners also have it. A strong vacuum cleaner can do the work of two horses!

While internal combustion engines power cars, there are many different types of engines in use today. The steam engine was once a very popular kind of engine. Coal was used to create steam, which powered steamboats and trains and heated people's houses. Jet engines are another type of combustion engine. They burn fuel to create an extremely powerful blast of air, capable of propelling airplanes at high speeds over long distances.

SKIM AND SCOOP: PASSAGE 4

Main Idea:

If it's a clear night, you can see that stars seem to come in many colors. All stars are huge balls of burning gas, but the truth is that there are many different kinds of stars: red giants, blue giants, white dwarfs, brown dwarfs, and even main sequence stars like our sun. Each kind of star has unique characteristics. Some stars are relatively small and hot, and some are larger and cooler.

Most stars are called main sequence stars. At its core, a main sequence star burns hydrogen, creating helium and a massive amount of energy. This energy keeps the main sequence star from collapsing under its own weight. It sends this energy out into space. The sun is a main sequence star, and the light we receive comes from hydrogen fusing into helium.

The process of combining hydrogen into helium is called nuclear fusion. Nuclear fusion is when two smaller atoms are forced together, forming one larger atom and releasing a large amount of energy. In stars, nuclear fusion is powered by the intense pressure of gravity. The incredible force at the core of a star can sustain a fusion reaction for billions or trillions of years.

Eventually, however, the supply of hydrogen will begin to run low, and the main sequence star will transform into a red giant. If the star is large enough, it will begin fusing helium into carbon. This new boost of energy pushes the gas of the star outwards, causing the red giant to grow ten to a hundred times larger in the process. Because they are so large, red giants actually have cooler surface temperatures than main sequence stars, which is why they appear to be reddish orange.

Sometimes stars are so massive that when they collapse, they explode. This is called a supernova. When a huge star runs out of nuclear fuel, its core collapses, reigniting nuclear fusion. However, the energy released is so powerful that it blasts the star apart, creating a supernova. Supernovas eject a lot of energy and matter, making them very important to the life of stars in the universe. New stars may form from the gases released in a supernova. Also, heavy elements found on earth, such as uranium or plutonium, are created by supernovas.

SKIM AND SCOOP: PASSAGE 5

Main Idea:

Back in 1912, the Titanic was the biggest ship in the world. Nicknamed “The Wonder Ship,” the Titanic was as long as three football fields and as tall as a seventeen-story building. Some people described the Titanic as a floating palace. It had restaurants, a heated swimming pool, a gym, two libraries, and two barber shops. The Titanic even had its own newspaper and post office! The Titanic was also considered to be the safest ship ever built.

On April 10, 1912, the Titanic set sail for the very first time. It left its port in England with over two thousand people on board. The Titanic sailed across the Atlantic Ocean on its way to New York. But something terrible happened four days later on April 14, 1912, just before midnight. The Titanic hit an iceberg that ripped a hole in its bottom. Water started gushing into the ship. The Titanic was sinking!

The workers on the Titanic tried to signal for help using the ship's radio and warning rockets. One ship, the Californian, was only ten miles away - close enough to save everyone. But the radio on the Californian was turned off because it was so late at night. No one heard the calls for help. Sailors on the Californian saw the rockets that looked like fireworks. They did not understand that the Titanic was in trouble, so they did not come to help.

The people who survived the sinking of the Titanic were those who escaped by getting into lifeboats. But there were only 20 lifeboats on board, and they could only hold half of the people. Hundreds of people were left on board the Titanic. Some tried to jump into the icy waters. A few of them were lucky enough to reach a lifeboat. The biggest ship in the world sank in less than three hours. Only 705 people survived.

New safety laws were passed after the Titanic sank. Today, every ship must have enough lifeboats to hold every single person on board. Ship radios can never be turned off, so ships can hear every call for help. There are also special ice patrol airplanes to warn ships about dangerous icebergs. The whole world learned a hard lesson from the sinking of the Titanic.

SKIM AND SCOOP: PASSAGE 6

Main Idea:

Althea Gibson was born on August 25, 1927 in Silver, South Carolina and moved at a young age with her family to Harlem, New York where she was raised. Althea's early life was filled with hardships. Her parents had a difficult time earning a living and Gibson often skipped school because of her struggles in school.

Fortunately for Althea, she loved sports. Althea was lucky because the street in front of her apartment was turned into a play area during the day; no cars were allowed and kids could play any game they wanted. Her favorite sport was ping pong. She would play every day after school, practicing until she could beat anyone who challenged her. She was the ping pong champion of New York City when she was 12 years old; no adult could beat her! She was very good at sports because she always practiced hard. When she was older she was even a professional golfer. But when she was 14 she was introduced to the sport that would change her life: tennis.

She quickly earned fame as a champion tennis player. She won her very first tournament in 1941 at a local tournament sponsored by the American Tennis Association, which existed to promote and sponsor tournaments for black players. She became the first African American woman tennis player to win the U.S. National Championships, the Wimbledon Tennis Championship, and the French Open Championship. She was so famous that she was inducted into the Tennis Hall of Fame in 1971.

Being black made Althea's life harder, but she fought back. Early in her career, she was not invited to play in major competitions, even though she was good enough. After many players, fans, and former champions protested that Althea deserved a chance, she was allowed to compete. With each victory, she fought for recognition and rights for black people. In her own words, "Shaking the hand of the Queen of England is a long way from being forced to sit [in the back] of the bus."