

**FAILURE**

**TIME**

# **DISASTERS** **in History**



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For Review Only

# The Search for Answers

If you focus on disasters throughout history, it is hard to imagine how **humanity** has survived this long! Human actions have resulted in a **multitude** of disasters. Ships have sunk. **Space shuttles** have exploded. Nuclear plants have had large-scale meltdowns. The list is long. Inevitably, studying some of the biggest disasters leads to questions. We want to know how and why such tragedies happened.

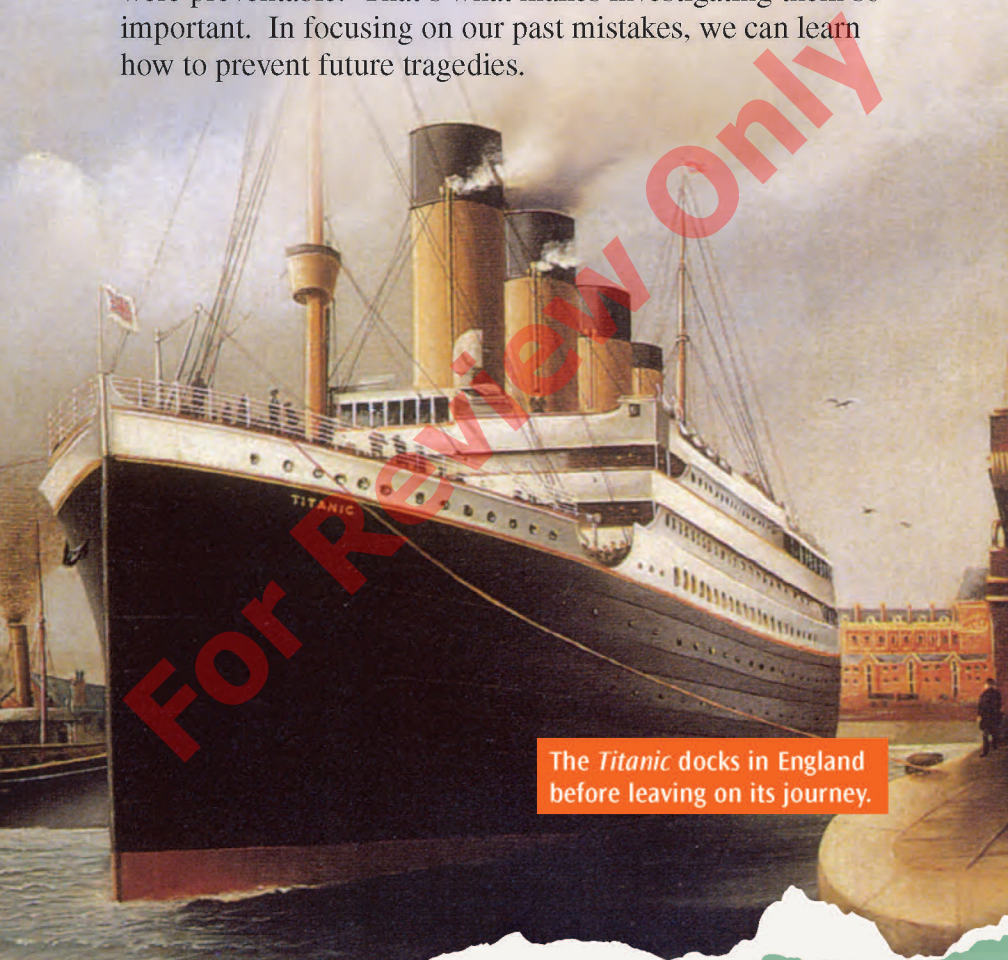
## The HMS *Victoria*

In a truly **needless** disaster, the British warship the HMS *Victoria* was sunk during a **botched** performance in 1893. A fleet of ships was intended to sail in two lines as a crowd watched. But due to poor calculations, two ships collided. As a result, the HMS *Victoria* sank, and hundreds of people died.





The answers vary from disaster to disaster. Some catastrophes are caused by **ignorance**. Others stem from people with big egos, unwilling to admit fault. Some are just the result of sloppy mathematics. But many disasters were preventable. That's what makes investigating them so important. In focusing on our past mistakes, we can learn how to prevent future tragedies.



The *Titanic* docks in England before leaving on its journey.

# Massive Malfunctions

Some of history's greatest disasters were caused by engineering mistakes and poor designs. These errors have led to **fatal** explosions, disastrous fires, and the sinking of the world's most famous ship. Each tragedy will be forever remembered.

## The *Hindenburg*

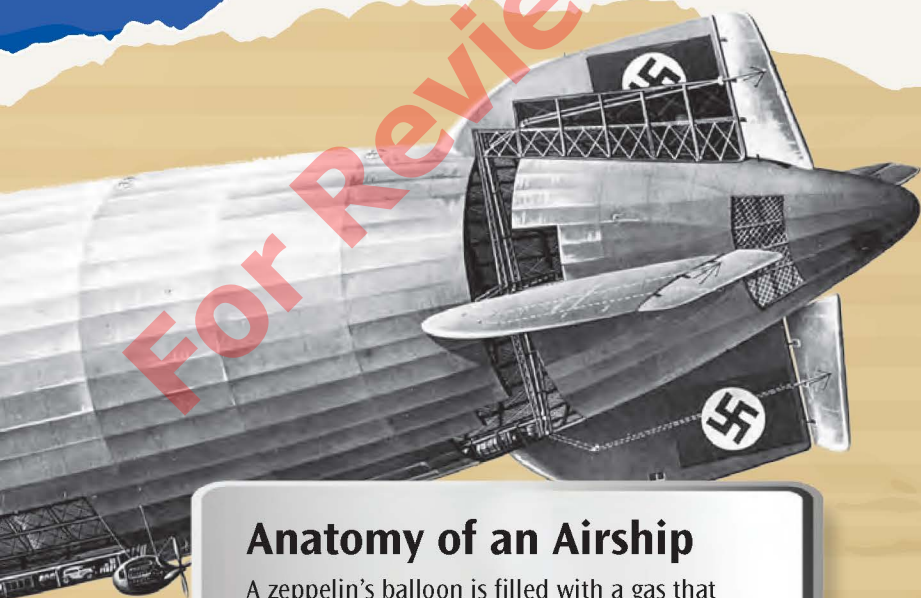
On May 6, 1937, an 804-foot-long (245-meter-long) airship carrying 97 people erupted into **flames**. The world was horrified. How could this happen?

### Petite Piano

A special baby grand piano was made to provide entertainment aboard the *Hindenburg*. It weighed about 350 pounds (160 kilograms). That's much less than a standard baby grand piano, which weighs 500 lb. (225 kg) or more. It was made mostly of aluminum. By 1937, the piano had been removed and put on display, so it wasn't on the ill-fated voyage.



The *Hindenburg* was a **rigid** airship known as a **zeppelin**. The first zeppelin was designed by and named after Ferdinand Graf von Zeppelin, a German soldier. But the *Hindenburg* was different from previous airships. It was the largest of its kind. People around the world learned of the airship and were impressed by its size and speed—it could reach up to 84 miles per hour (135 kilometers per hour). No one thought that the airship would come to ruin.



## Anatomy of an Airship

A zeppelin's balloon is filled with a gas that is lighter than air. Beneath the balloon is the passengers' gondola. The airship is engine powered and steered by pilots.



The *Hindenburg* completed many trips. The world watched as it made its way from Germany to the United States and back again. But, tragedy struck in 1937. While the *Hindenburg* was landing in New Jersey, a massive fire overtook it. The zeppelin went up in flames. In moments, all that was left of the ship was a broken and twisted steel shell. That day, 36 people died.

There are conflicting theories about what went wrong, but many agree that the likely cause was the zeppelin's use of hydrogen gas. In order to float, the *Hindenburg* had been filled with hydrogen, an extremely flammable gas. Worse, the dangerous properties of hydrogen were well known at the time.

After the disaster, airships were no longer trusted. The image of the zeppelin in flames had been stamped on the minds of the public. The *Hindenburg* was an unnecessary disaster that could have been averted.

## Legendary Letters

Passengers paid high prices for their tickets. Even so, the *Hindenburg* was mostly funded by its use as a mail-delivery airship. As the zeppelin caught fire, so did over 17,000 letters, notes, and other forms of mail. Only 360 of these notes survived.





## Famous Words

On the day of the tragedy, Herbert Morrison, a broadcast reporter, spoke unforgettable words. As the *Hindenburg* caught fire, Morrison exclaimed, “Oh, the humanity! All the passengers! I don’t believe it!”