

# What Would Happen...

Imagine if these crazy scenarios actually came true!

What would happen if you had an invisibility cloak? What if Earth's continents had never broken up? Nat Geo Kids tracked down the answers to these and other curious questions...

## ...if Earth's gravity disappeared?

Things would really be up in the air! Gravity is the force that pulls objects towards Earth's centre, keeping objects – and us! – grounded. It also holds the planet together. If this force vanished, anything that's not secured to the ground would float off into space – including water from oceans, lakes and rivers! Buildings might remain in place for some time, but the people, animals and items inside would weightlessly drift upwards, a bit like astronauts do in space. And eventually, without gravity to keep Earth intact, the planet would break into pieces. Luckily scientists agree that it's impossible for Earth's gravity to disappear, so that's a weight off our shoulders!



## ...if you got sucked into a black hole?

Want to be a space adventurer? Well, stay away from these dark destinations during your jaunt across the galaxy! Most black holes form when dying stars collapse, creating an area of space with an extremely strong gravitational force that sucks in anything nearby. If you were dragged into one of these locations, the force of gravity would cause you to become longer and thinner until you were as thin as spaghetti! Eventually you'd be stretched so thin that everything would snap into smaller and smaller bits. Luckily, the chances of you actually encountering a black hole are, well, beyond slim!



## ...if Earth's continents had never broken apart?

It would be a bad break for humans. Around 200 million years ago, Earth had just one giant landmass called Pangaea. Over time the movement of large plates that make up the outer layer of Earth's crust broke Pangaea into several continents, which slowly drifted to their current locations. If Earth's land had stayed as one gigantic continent, moisture from the ocean would dry before reaching the area's vast interior, likely making it desert-like. Reptiles often thrive in dry conditions, so if Pangaea still existed, it might be overrun with them. Hope you like lizards!



## ...if you had a time machine?

You could head back to Ancient Egypt, zip to the Victorian era or hurtle into the future. But don't expect to change history by, say, introducing King Tut to a smartphone. Some scientists think it's possible that our universe is one of many alternate 'parallel' universes, each with its own timeline (yes, really!). And if time travel could happen, they reckon a new universe with a different timeline would form the moment the traveller did something to alter the future. But nothing would change in your original timeline, so when you returned to your jumping-off point, you wouldn't see the consequences of your trip. Other scientists think there's only one universe with one timeline that cannot be changed no matter what. So if you were hoping to alter history to become a zillionaire in the present, you're out of luck!



## ...if you owned an invisibility cloak?

Scientists are actually researching whether it's possible to manufacture invisible materials that can be used to create objects! That means invisibility cloaks might be a reality one day. If so, you'd be able to play a lot of practical jokes. Spies would undoubtedly wear the cloaks to eavesdrop on enemies, and soldiers would use them to launch sneak attacks. But the cloak's material could also save energy – and lives! It might be manufactured into the walls and roofs of homes, which could be switched into 'transparent mode' during the day to let in light and heat. And surgeons could wear gloves made with the fabric to see through their hands as they operate on patients. Now that's clearly cool.

