Read the text, then answer the questions at the bottom of the text.

Inertia: Objects Don't Like to Change

Inertia is a big word that means objects like to stay how they are—either still or moving. Imagine a toy car on a smooth floor. When you push it, it moves forward until something (like the floor or a wall) stops it. That's because it wants to keep moving in a straight line, but other things get in the way.

In everyday life, we see inertia in action all the time. When you're in a car and it speeds up, you feel pushed back into your seat. That's because your body wants to stay still while the car is moving. When the car stops suddenly, your body wants to keep moving forward.

Seat belts and airbags in cars are like superheroes that help us when inertia tries to make us keep moving during accidents. They keep us safe by stopping us from flying forward too much.

Inertia also affects how heavy or light objects are. Heavy things are harder to stop or move than light things. For example, it's easier to stop a bike than a big truck because the truck has more stuff in it, so it has more inertia.

To show how inertia works, you can try pushing a toy car or watching how things move on a spinning merry-go-round. It's all about how objects resist changes in their motion.

In summary, inertia is a fancy word for the fact that objects like to stay how they are—still or moving. It's why things act the way they do when they're pushed, pulled, or stopped.

1. What does "inertia" mean?

the tendency of a body to resist a change in motion or rest

2. What happens to a toy car when you push it on a smooth floor?

It will move forward fast and will stop when a wall will stop it called inertia

3. Why do you feel pushed back into your seat when a car speeds up?

your body wants to remain at rest due to inertia

4. What does your body want to do when a car stops suddenly?

Keep Moving forward

5. How do seat belts and airbags help keep us safe during accidents?

It will stop the person from moving forward and may hit their head on somthing

6. How does the weight of an object affect its inertia?
The greater an object's mass, the greater its inertia
7. Why is it easier to stop a bike than a big truck?
Because a bike weighs lighter than a big truck.
8. How can you show someone how inertia works?
Put your hand, palm side up, next to your ear. Put a coin on your elbow. In one swift motion, bring your hand straight forward and try to catch the coin before it drops.
9. Why do objects resist changes in their motion?
If all the external forces cancel each other out, then there is no net force acting on the object
10. Can you explain what you've learned about inertia in your own words?
I have learnt that inertia helps you in certain ways.