
TIME FOR KIDS
Final Lap!
GO-KART RACING
110
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For teachers' inspection ONLY

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The Thrill of the Ride



The driver looks down from the top of the hill. The road below curves sharply. The car rumbles. The flag drops, and the race starts! The driver sets off, and the **engine** roars. The fans go wild.

Go-karts are an exciting way to get around, have fun, and even race with other drivers. A go-kart is a small vehicle with four wheels. Go-karts come in many sizes and materials. They can be simple push karts without a motor, or they can be racing machines with powerful engines.

In 1955, Art Ingels built the first go-kart. He is sometimes called the Father of Karting. He used a lawn mower engine and scrap metal to build his first kart!

THINK LINK

Think you're ready to hit the road? Here's what you'll need to know before you get started:

- how to build a go-kart
- simple safety tips and racing rules
- the importance of math in this high-octane sport

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Building a Machine

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Many people enjoy go-karts as a hobby. They find that part of the fun is actually building the kart. Working with someone else makes it even more fun. Building go-karts requires a lot of cooperation.

Building Basics

It is important to have a plan before starting to build. This plan might be a **blueprint** of some kind. It shows what the finished kart will look like. Making a plan uses math skills. There are measurements and estimates. Calculations need to be made. Using math lets drivers build the kart that's right for them.

Kart or Buggy?

Go-karts are named different things around the world. They may be called *go-karts*, *buggies*, or *soapbox racers*. In Australia, they are called *billy carts*.



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Within a Fraction of an Inch

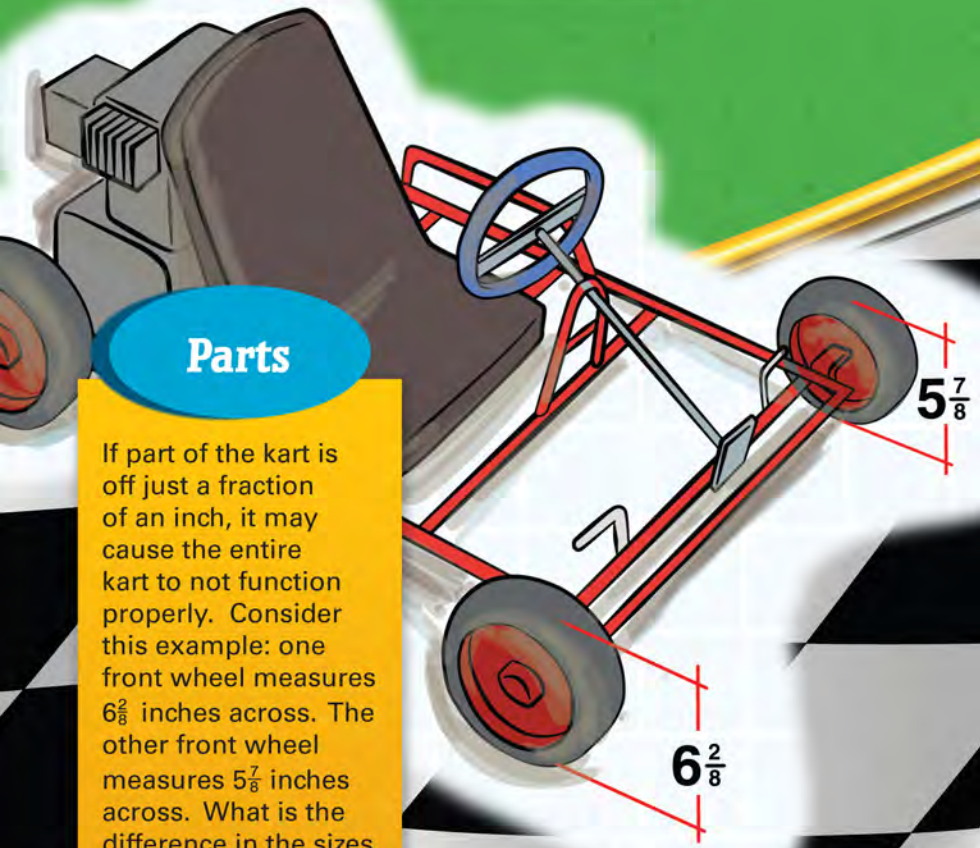
People who build go-karts must make precise measurements. Parts, time, and distance must all be measured carefully.

Distance

The length of the track must be measured precisely. It determines how wide the track should be, how many drivers can race at one time, and what type of race it will be.

Parts

If part of the kart is off just a fraction of an inch, it may cause the entire kart to not function properly. Consider this example: one front wheel measures $6\frac{2}{8}$ inches across. The other front wheel measures $5\frac{7}{8}$ inches across. What is the difference in the sizes of the wheels?



Time

A stopwatch can time multiple racers at the same time. The timer will note each driver's time within a fraction of a second.





- If a kart had front wheels of different sizes, how do you think it would affect the kart?
- Would the kart be safe to drive?
- Would the difference in size slow down the kart?