



Inquiry Science

Topic: Magnetic Compasses

You decide to take an exciting three-day sailing trip on Lake Ontario. The plan is to sail from Rochester, NY to Kingston Ontario navigating by GPS.

The first day of the trip goes well, but on the second day, your GPS fails. You try to fix the electronics, but with no success. Your only option is to navigate the rest of the trip using your onboard compass. Based on your last GPS reading, you were 180 miles due south of Kingston.

Using your compass, you point the boat due North and carefully keep track of your heading. 30 hours later you finally see land! Amazingly though, it's not Kingston. In fact, you arrive at a port town almost 30 miles west of Kingston!

You're certain you did a great job sailing on your compass heading. Explain why you are so far from where you should be.



Describe your hypothesis and explain what research you would do to prove your hypothesis. Your research should support your hypothesis!