

Mobile Sensors

Due Apr 22 at 11:59pm**Points** 10**Questions** 10**Time Limit** 30 Minutes

Instructions

Make sure you go over the [mobile sensor slides](https://drive.google.com/file/d/1xSFaUAPf9cr--k32-ytBDPY7bywGxerj/view?usp=sharing) [\(https://drive.google.com/file/d/1xSFaUAPf9cr--k32-ytBDPY7bywGxerj/view?usp=sharing\)](https://drive.google.com/file/d/1xSFaUAPf9cr--k32-ytBDPY7bywGxerj/view?usp=sharing) before taking this quiz.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	15 minutes	9 out of 10

Score for this quiz: **9** out of 10

Submitted Apr 16 at 3:40pm

This attempt took 15 minutes.

Question 1

0 / 1 pts

A mobile sensor is a sophisticated computer program that simulates real-world events.

ou Answered

☒ True

orrect Answer

☐ False

Question 2

1 / 1 pts

What sensor determines whether your phone should be in portrait or landscape mode?

Correct!

- ☐ magnetometer
- ☐ barometer
- ☐ gyroscope
- ☒ accelerometer

Question 3**1 / 1 pts**

What is the best sensor to use in a racing video game that uses your phone as a steering wheel?

- ☐ GPS
- ☐ proximity sensor
- ☐ accelerometer
- ☒ gyroscope

Correct!**Question 4****1 / 1 pts**

Which of the following is NOT a property of a good sensor?

- ☐ does not influence the measured property
- ☐ sensitive only to the measured property
- ☒ co-ordinates with other sensors
- ☐ outputs a signal that is linearly proportional to the measured property

Correct!

Question 5**1 / 1 pts**

Drift in a sensor is typically corrected by:

Correct!

- ☒ calibration
- ☐ signal processing
- ☐ shaking your phone
- ☐ updating the driver

Question 6**1 / 1 pts**

These two sensors are typically located at the top of your phone and help save battery power by dimming or turning off the screen

Correct!

- ☐ accelerometer and gyroscope
- ☐ humidity sensor and ambient temperature sensor
- ☒ proximity sensor and ambient light sensor
- ☐ camera and microphone

Question 7**1 / 1 pts**

Which sensor can be used to scan barcodes?

Correct!

- ☐ magnetometer
- ☐ accelerometer
- ☒ camera
- ☐ proximity sensor

Question 8**1 / 1 pts**

Which sensor can be used as a metal detector?

- ☐ barometer
- ☐ accelerometer
- ☐ Geiger counter
- ☒ magnetometer

Correct!**Question 9****1 / 1 pts**

When your phone is at rest, the (up-down axis) accelerometer should measure

- ☒ 9.8 m/s² upward acceleration
- ☐ 9.8 m/s² downward acceleration
- ☐ 0 acceleration
- ☐ non-constant acceleration

Correct!

Question 10**1 / 1 pts**

You can typically calculate your position accurately with data from only two GPS satellites.

☐ True☒ False**Correct!****Quiz Score: 9 out of 10**