



ATOMIC OBJECT

# TECHNOLOGY SHOWCASE

## 7 Things about Sphero

### 1 - What is it?

Sphero is a spherical robot that can be paired with a tablet or smartphone. You can change Sphero's color, play different missions, and control Sphero's movements from a multitude of different apps for a customizable experience

### 2 - How does it work?

The outside of Sphero is a plastic sealed shell. Since the outside shell of Sphero is completely sealed it uses wireless charging to get its energy. Sphero uses bluetooth to connect with your smartphone or tablet. Inside of Sphero it uses an accelerometer and gyroscope to do its movement.

### 3 - Who's doing it?

The first Sphero was made by Ian Bernstein and Adam Wilson. It was created from a 3D printed shell and parts of an old smartphone. Now Sphero has grown and works with major companies such as Disney.

#### **4 - Why is it significant?**

Sphero has made robotics more accessible for all ages. You can write macros to control Sphero without a vast programming background. Many younger students are using Sphero to get exposed to new technology outside of the classroom setting.

#### **5 - What are the downsides?**

Having the Sphero be a manually operated robot there Sphero is often ran into walls and jumped off ramps. As fun as this is it can cause internal damage to Sphero rather easily and cause control and connectivity issues.

#### **6 - Where is it going?**

Sphero started with one application and one robot and has now expanded to over 30 applications and a variety of robots. Their future plans is to make more education related robotics and have a “Sphero Heros” ambassador program. This program allows for teachers to learn more about technology and how to incorporate it into the classroom.

#### **7 - What are the implications for higher education?**

Even though you don't need an extensive programming background to work with Sphero the more programming and engineering knowledge you have, the more advanced things you can do with Sphero.

