

# Unit 3 Spheros

Content Area: **Technology**  
Course(s):  
Time Period: **February**  
Length: **4 Days**  
Status: **Published**

## Unit Overview

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The Spheros unit has several components. First, the students will become familiar with the operation and use of the Spheros and how a device can control a simple robot. Once the students have familiarized themselves with the procedures for Sphero operation, they will then solve engineering challenges using the robots. Examples of such challenges include, but are not limited to: navigating a maze, hitting a target, or pulling a load.

## Standards

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CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.CS.2	Explain the functions of common software and hardware components of computing systems.
CS.K-2.8.1.2.CS.3	Describe basic hardware and software problems using accurate terminology.
CS.K-2.8.2.2.ED.1	Communicate the function of a product or device.

## Materials

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- Spheros
- Ipads

## Assessment

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### Formative Assessment

- Teacher Observation
- Checks for Understanding
- Exit Tickets

### Summative Assessment

- Performance Tasks & Projects

## **Accommodations & Modifications**

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### **Special Education**

- Follow IEP Plan which may contain some of the following examples...
- In class/pull out support with special ed teacher or assistant
- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

### **504**

- In class/pull out support with special ed teacher or assistant
- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

### **ELL**

- Translation device/dictionary
- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

### **At-risk of Failure**

- Preferred seating
- Directions repeated/clarified
- Extended time for completing tasks
- Vocabulary support
- Limit number of tasks

### **Gifted & Talented**

- Independent projects
- Online games
- Extension activities

## **Interdisciplinary Connections**

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## Career Readiness, Life Literacies & Key Skills

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TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
TECH.9.4.2.TL.1	Identify the basic features of a digital tool and explain the purpose of the tool (e.g., 8.2.2.ED.1).
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
TECH.9.4.2.TL.7	Describe the benefits of collaborating with others to complete digital tasks or develop digital artifacts (e.g., W.2.6., 8.2.2.ED.2).
TECH.9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic) (e.g., 2.2.2.MSC.5, RL.2.9).