

## Program Kit

At WisCode Literati, we believe that teaching our communities how to code is essential for the future! Learning to code allows individuals to interact and compete in a highly digital society by teaching computational thinking, critical decision-making, experimentation, troubleshooting, and cause and effect.

We offer various kits and resources to help librarians and educators offer coding and problem-solving programs to their communities. WisCode Literati was started by a group of librarians interested in problem solving, technology, and learning.

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### Basic Sphero

This kit is an introduction to building block programming using a Sphero robot and the Sphero SPRK app for iOS or Android.

#### Why?

The SPRK app for the Sphero lets users program the robot's movements using drag and drop programming and learn about basic coding.

#### Who?

This can be done with kids age 10 and older. A smaller group is best, with one Sphero and one tablet for each 2-3 kids.

#### What?

- One Sphero SPRK or Sphero 2.0 for each 2-3 kids
- One tablet with the Sphero SPRK app installed for each Sphero.
- Masking tape
- Rulers and yardsticks
- Protractors
- Stop watches
- Pencils and paper
- Miscellaneous objects to create a maze

#### How?

To prep, mark shapes and lines on the floor using masking tape- a square, a circle, a zig zag, and any other shapes you want!

**Dream Big. Learn Code.**

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Start with a demo of Sphero to show what it can do. Then, demo the SPRK app to show drag and drop blocks for programming movement and how to move forward and change direction.

Once kids are familiar with how to use the building blocks, let them work at their own pace to complete challenges:

- Move your Sphero in a square, circle, etc
- Program your Sphero to trace the tape lines on the floor; then, trace them faster!
- Lay out a maze and program your Sphero to make it out alive

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**Extras**

While this can be done with a smaller Sphero/kid ratio, it is not advisable unless there are alternate activities available of equal interest. A Sphero can be an instant kid magnet, and those not taking an active turn will get restless.

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**Contributor**

This kit was created by Holly Storck-Post.