# **Tech Tots**

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**Objective:** To introduce technological concepts covering electricity, circuits, and computers, by engaging in age-appropriate actives that prepare the student for deeper understanding as skill and developmental level progress.

### Syllabus:

## Fall 2024

#### **ELECTRICITY**

Week 1 (Aug 26-30) - What is Electricity? Demonstration of projects. Safety. Will it conduct?

Week 2 (Sep 2-6) - What is a Magnet? Metals, electromagnets, generators

Week 3 (Sep 9-13) - My First Circuit Journal - Simple Circuits

Week 4 (Sep 16-20) - My First Circuit Journal - Parallel Circuits

Week 5 (Sep 23-27) - LED Bugs (extra safety discussion about coin cell batteries)

Week 6 (Sep 30- Oct 4) - Snap Circuits - light with a switch

Week 7 (Oct 7-11) - Snap Circuits - motor with a fan

### Fall Break Oct 14-18

#### **COMPUTERS**

Week 8 (Oct 21-25) - What is a Computer? Make an abacus.

Week 9 (Oct 28 - Nov 1) - What's inside a Computer? Make your own paper computer.

Week 10 (Nov 4-8) - Hello Ruby. Play Lego Bits and Bricks.

Week 11 (Nov 11-15) - Hello Ruby - Journey inside the Computer. Create a Clicker Game on SCRATCH

Week 12 (Nov 18-22) - Finish Clicker Game on SCRATCH

### Thanksgiving Break Nov 25-29

# **CHALLENGE**

Week 3 (Dec 2-6) - Minecraft Education Edition

Week 14 (Dec 9-11) - Minecraft Education Edition

Week 15 (Dec 16-20) - Minecraft Education Edition