The Internet of Things
Teacher Guide

The Internet of Things is a *CS and Society* resource which aims to:

- make students aware of the widespread applications of the Internet of Things, and
- encourage them to weigh the pros and cons of having internet connected devices.

The resource is divided into four sections:

DIP

The DIP section is designed to introduce the topic, discover what students already know, and encourage curiousity.

This section contains a definition of the Internet of Things, and a kahoot activity to survey students' experiences with internet connected devices.

- Kahoot activity: rebrand.ly/kahoot-connected-devices
- (Optional) Paper kahoot: kahootConnectedDevices.pdf

DINE

The DINE section is designed to introduce new concepts and explore content.

This section contains a project where students research how IoT is applied across various sectors of society. It also contains an article focussing on privacy concerns which students are asked to summarize.

- Residential video: rebrand.ly/iot-residential
- Retail video: rebrand.ly/iot-retail
- Education video: rebrand.ly/iot-education
- City Planning video: rebrand.ly/iot-city-planning
- Farming video: rebrand.ly/iot-farming
- Transportation video: rebrand.ly/iot-transportation
- Health Care video: rebrand.ly/iot-health-care
- Construction video: rebrand.ly/iot-construction
- Big Brother article: rebrand.ly/big-brother-alexa
- Blank summary: summaryBlankBigBrother.pdf
- Fillable summary: summaryFillableBigBrother.pdf

DIGEST ࿓

The DIGEST section is designed to make learning personal. It challenges students to reflect, internalize, and act.

This section asks students to track the internet connected devices they encounter over a one-week period. It also asks students to imagine and think critically about their future (smart) homes.

- (Optional) Iot Scavenger Hunt tracking sheet: Google Sheet

DESSERT 🍰

The DESSERT section is designed for those who want more. It may contain links to additional videos, articles, and websites, or include some enrichment challenges.

This section contains links to more information, online courses to build your own internet connected devices, and the book 1984 by George Orwell.

- IBM: rebrand.ly/ibm-what-is-iot
- IoT Agenda: rebrand.ly/iot-agenda
- Skyfi Labs: skyfilabs.com/iot-online-courses

Visit cemc.uwaterloo.ca/resources/cs-and-society.html for more *CS and Society* resources.