### SMART Devices

IN THIS ASSIGNMENT YOU WILL THINK LIKE A COMPUTER PROGRAMMER AND DESIGN A NEW SMART DEVICE THAT WILL HELP KIDS

Smart devices are types of technology that can hold information

Check out these cool videos about smart devices:
Steering Wheel
Baby Bottle
Smart Houses







Types of Technology

## Information About Yourself

A smart device can tell you what your heart rate is. It can also tell you how much money you spent last week.



# Information About Your Community

A smart device can tell you if there is traffic near your house. It can also tell you where the nearest doctor's office is.



What Can Smart Devices Do?

#### Sounds

#### Some devices have sounds that tell you when to do something. For example, a sound can tell you when you should put sunscreen on outside.

# Pictures and Graphs

Some devices have pictures or graphs. For example, a graph could show you how much running you did outside during recess for the week.

#### Information

Some devices have information. For example, a device could have information on if a school bus is going to be late.

#### How Do Smart Devices Work?

A computer programmer is a person who writes computer programs. They write code, which are instructions that tell a computer what to do.



Computer Programmer

Computer programmers go to school to learn special computer languages. One popular language is Python. Computer coders learn how different words tell a computer to do different things.

For example, if you tell the computer this:

open ("Pizza Points")

This tells the computer to open a game called Pizza Points!



### Computer Programmer

A computer programmer also finds "bugs" in a program. A bug is a mistake or problem in a program. Have you ever played a computer game and a certain button wasn't working? This is a bug. A computer programmer is in charge of fixing this bug.



Computer Programmer

## My Smart Device

Choose a problem you want to solve with your new smart device. Circle your choice.

Problem #1: Kids keep losing their pencils and other school supplies at school!

Problem #2: Kids don't know how much water they are drinking during the day. They are getting dehydrated during recess.

Think of an item that can be turned into a smart device to solve the problem. Answer the questions about the item you have chosen.

What item will you turn into a smart device?

How will the smart device solve the problem you have chosen?

How will your smart device work? What features will it have?

#### Sketch what your smart device will look like here: