## **ENVIRONMENTAL IMPACTS OF DIGITAL TECHNOLOGIES**

2.1 How many connected devices do you have?

## Auteurs :

- Françoise Berthoud, CNRS / GRICARD / EcoInfo
- Charles Poulmaire, NSI and SNT teacher, academic trainer

## To get started: How many connected devices do you have?

Capsule slide	Related text
How many connected devices do you have? Digital technologies have entered our professional activities, administrative services, agriculture, finance, medicine, research globally in all sectors of society, including art. Of course, it also entered our homes everywhere. By the way, do you have any idea how many connected objects do you own? Let's see!	<ul> <li>How many connected devices do you have?</li> <li>Digital technologies have entered into our professional activities, administrative services, agriculture, finance, medicine, research globally in all sectors of society, including art.</li> <li>Of course, it also entered into our homes everywhere. By the way, do you have any idea how many connected objects do you own?</li> <li>Let's see!</li> </ul>
Ouestion 1 How many connected or connectable objects, with or without screen, do you have in your home, all people?	Question 1         How many connected or connectable objects, with or without screen, do you have in your home, all people?         Write a number

Capsule slide	Related text
Question 2	Question 2
How many people live in your home?	<b>How many people live in your home?</b> Write a number
But by the way, have you thought about vehicle equipment, health monitoring objects, connected watches, multimedia equipment, home equipment (thermostats, smoke detectors, surveillance camera, alarms, locks, intercoms, lamps,), household appliances, home assistants, drones, Have you counted the still functional equipment waiting in the drawers or in the attic? Come on, refine your list!	Feedback 1         XX connected objects/person         So this would make XX connected or connectable objects per person         (to calculate it => divide the number of connected objects by the number of people living in your household)         If the result is less than 11         But by the way, have you thought about vehicle equipment, health monitoring objects, connected watches, multimedia equipment, home equipment (thermostats, smoke detectors, surveillance camera, alarms, locks, intercoms, lamps,), household appliances, home assistants, drones,         Have you counted the still functional equipment waiting in the



	•	Related text
Capsule slide You are hyper-connected; obviously you have thought about health monitoring objects, connected watches, multimedia equipment, nome equipment (thermostats, smoke detectors, surveillance cameras, alarms, locks, intercoms, lamps,), household appliances, nome assistants, etc. And did you also count the number of still functional equipment waiting in the drawers or in the attic or connected equipment of the car? You can correct your answer if you wish.		Feedback 2 XX connected objects/personSo this would make XX connected or connectable objects per personIf the result is greater than or equal to 11You are hyper-connected; obviously you have thought about health monitoring objects, connected watches, multimedia equipment, home equipment (thermostats, smoke detectors, surveillance cameras, alarms, locks, intercoms, lamps,), household appliances, home assistants, etc.
		And did you also count the number of still functional equipment waiting in the drawers or in the attic or connected equipment of the car?
		You can correct your answer if you wish.
Refine your list by counting your connected objects!		You can correct your answer if you wish.           Refine your list by counting your connected devices
Refine your list by counting your connected objects! <b>Vehicle</b> <i>Car, electric scooter</i>	0	Refine your list by counting your connected devices
Vehicle	0	Refine your list by counting your connected devices Vehicle
Vehicle Car, electric scooter Connected Home Appliances		Refine your list by counting your connected devices         Vehicle         Car, electric scooter         Connected Home Appliances
Vehicle Car, electric scooter Connected Home Appliances Washing machine, fridge, scale, watch House Thermostat, smoke detector, camera	0	Refine your list by counting your connected devices         Vehicle         Car, electric scooter         Connected Home Appliances         Washing machine, fridge, scale, watch         House         Thermostat, smoke detector, camera

Capsule slide	Related text
For comparison purposes, know <b>that in France the average number</b> of connected objects per person was around 11 in 2019.	Bilan XX connected objects/person Your home finally counts XX
While the global average is around 8 connected objects per person. These values are <b>growing sharply</b> , given the ease of implementation	(to calculate it => add up all the connected objects and then divide this number by the number of people living in your household)
of these technologies and a strong tendency to use remote control systems.	For comparison purposes, know <b>that in France the average</b> <b>number of connected objects per person was around 11 in 2019.</b> While the global average is around 8 connected objects per person
Source : <u>iNUM : impacts environnementaux du numérique en</u> France. Greenit. 2020[consulté le 13/12/21]	These values are <b>growing sharply</b> , given the ease of implementation of these technologies and a strong tendency to use remote control systems.
	Source : <u>iNUM : impacts environnementaux du numérique en France.</u> <u>Greenit. 2020 [consulté le 13/12/21]</u>



## Credits :

<ul> <li>Authors :</li> <li>Françoise Berthoud, CNRS / GRICARD / EcoInfo</li> <li>Charles Poulmaire, NSI and SNT teacher, academic trainer</li> </ul>	A co-production of Class'Code / Inria
<ul> <li>Pedagogical team :</li> <li>Laurence Farhi, Tatiana Khomenko, Inria Learning Lab</li> <li>Sophie de Quatrebarbes, S24B for Class'Code</li> </ul>	With the support of the Minister of National Education, Youth and Sport and UNIT.
<ul> <li>Graphismes :</li> <li>Illustrations : Mikaël Cixous, 4 minutes 34</li> <li>Photographies of Guillaume Clémencin : Nicolas Ledu</li> </ul>	
This resource was produced as part of the <u>Mooc Environmental</u> impacts of digital technologies under licence <u>CC BY 4.0</u> FR 2021 <u>www.fun-mooc.fr</u>	

