

Les Intrépides de la Tech

Atelier découverte Culture numérique & Initiation Code

#numérique

#égalité filles-garçons

#orientation



SIMPLON

FOUNDATION

Avec le soutien de :



De quoi allons-nous parler ?

- **Culture Numérique**

Le numérique dans notre quotidien

Les métiers du numérique

Les femmes et la Tech

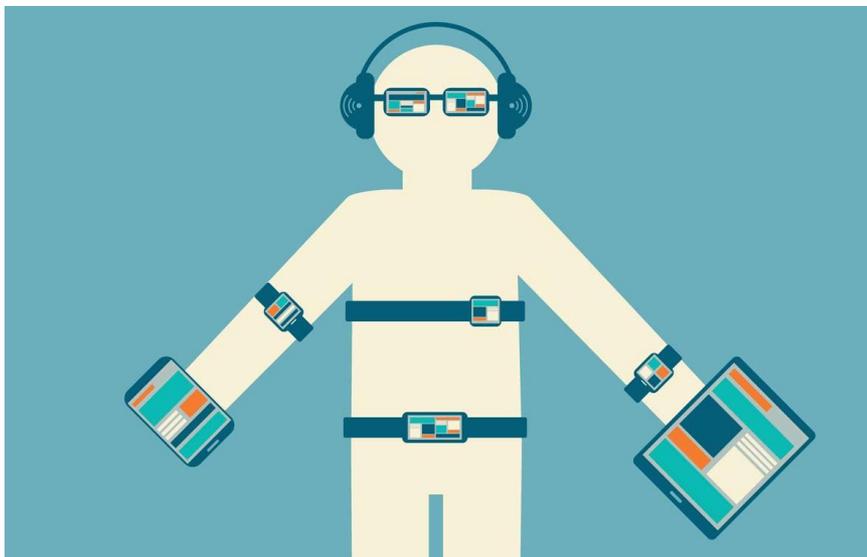
- **Découvrir la programmation informatique !**

Atelier Hour of Code Minecraft



01 Le numérique dans notre quotidien

Le numérique dans notre quotidien : équipements & usages

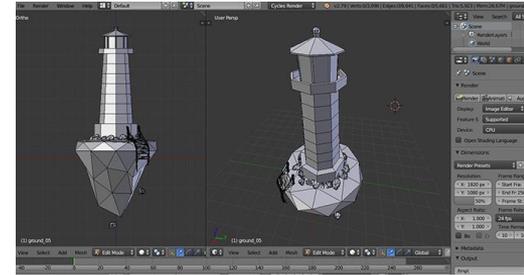


75% des gens en France ont un smartphone

75% ont un ordinateur (en baisse).

Les gens se connectent à internet de plus en plus avec leur téléphone et de moins en moins avec les ordinateurs.

Le numérique est partout !



les jeux vidéos, les objets, les transports, la finance, les médias, la Recherche scientifique ...

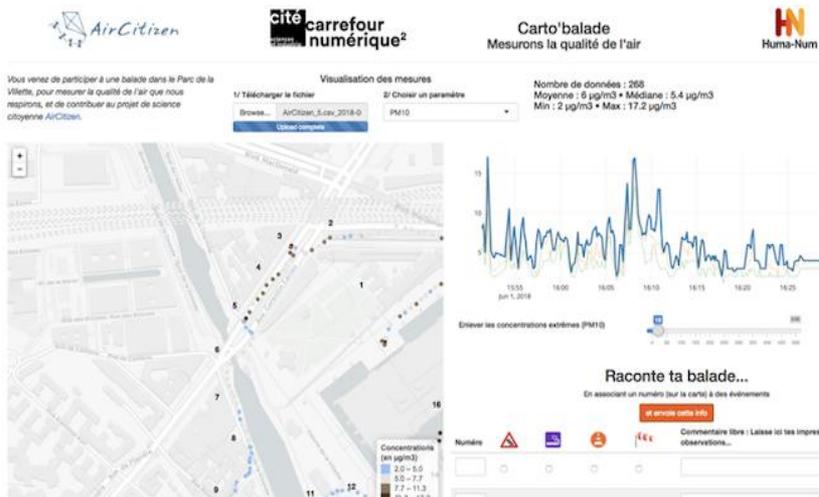
Sondage #1



Qu'est-ce qu'un "objet connecté" ?



Des objets qui captent, stockent et transmettent des données



Base de donnée capteur de qualité de l'air



la santé
(mesurer son cardio)



les loisirs
(musique)

Sondage #2



**Savez-vous ce qu'est
l'intelligence artificielle
et à quoi ça sert ?**



Sélectionnez toutes les images montrant des **voitures**
Lorsque vous avez terminé, cliquez sur le bouton de validation.

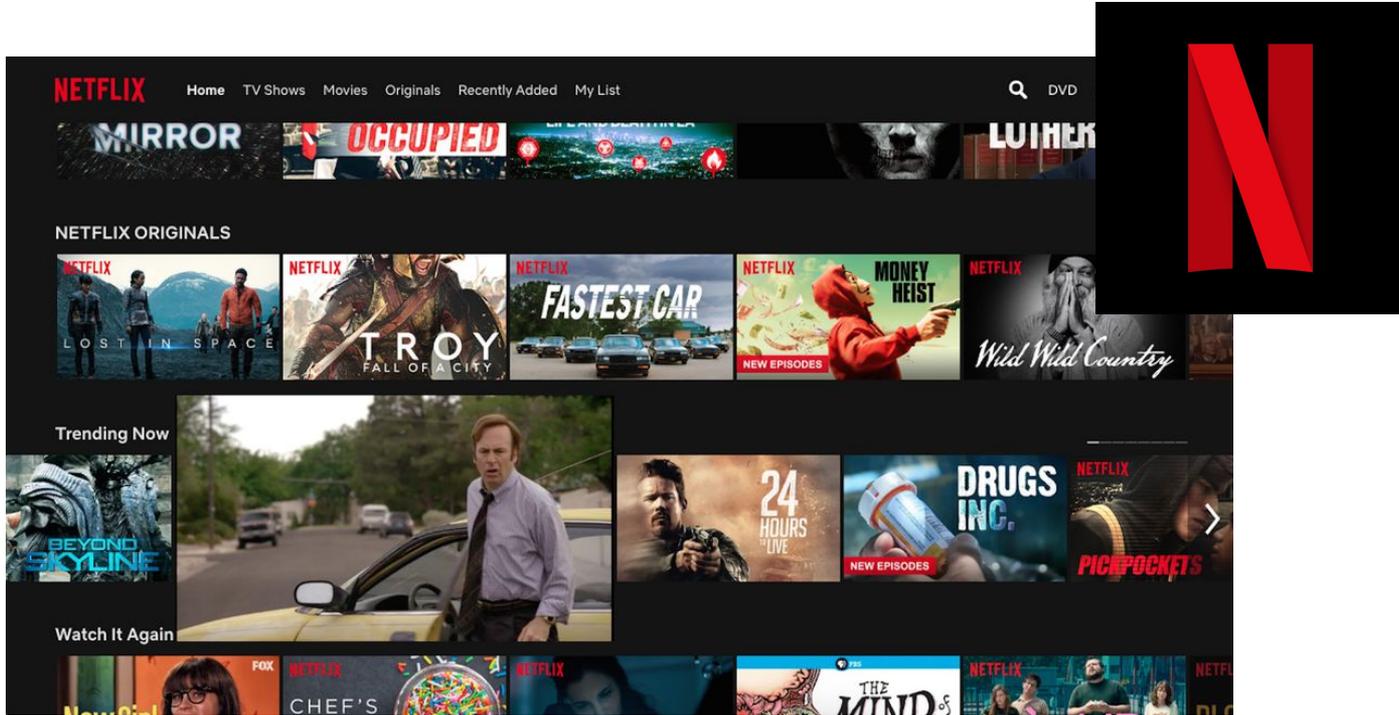
🔄 🎧 ⓘ

VALIDER

Exemple : La voiture autonome



Exemple : Les algorithmes Netflix



FUN FACTS



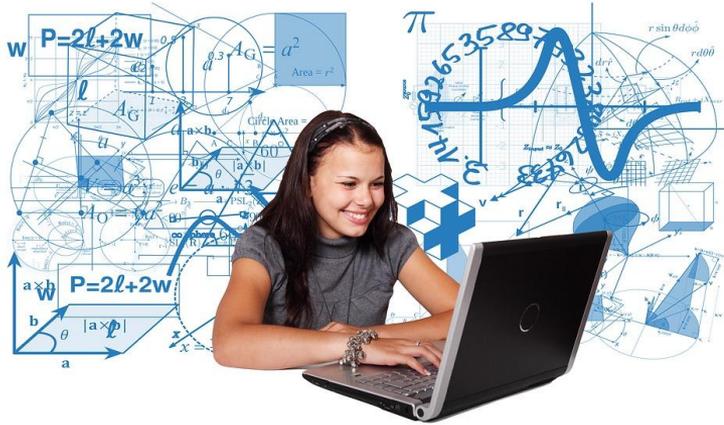
AlphaGo est devenu
imbattable aux échecs en
9 heures

[Documentaire](#)



[ThisPersonDoesNotExist](#)

Le numérique dans le quotidien



Le télétravail

L'école à distance



Mais pas si simple pour tout le monde...

Sondage #3



Savez-vous ce qu'est la
"fracture numérique" ?



Le numérique ce n'est pas simple pour tout le monde



“Illectronisme” :
Ne pas savoir utiliser
un ordinateur ou internet
> 17% de la population

Le numérique doit être adapté à tout le monde !

The image shows a digital accessibility tool interface. At the top, it displays "contrast ratio" in white text on a black background. Below this, a horizontal bar shows the background color "#320001" on the left and the text color "#BFF90D" on the right, with a central green circle containing the value "14.8". A tooltip box points to the circle, stating "Passes AAA level for any size text". Below the bar, the word "How" is partially visible. At the bottom, there is explanatory text: "As you type, the contrast ratio indicated will update. Hover over the circle to get more detailed information. When semi-transparent colors are involved as backgrounds, the contrast ratio will have an error margin, to account for the different colors they may be over."

L'accessibilité numérique permet aux personnes en situation de handicap d'accéder aux contenus et services digitaux.

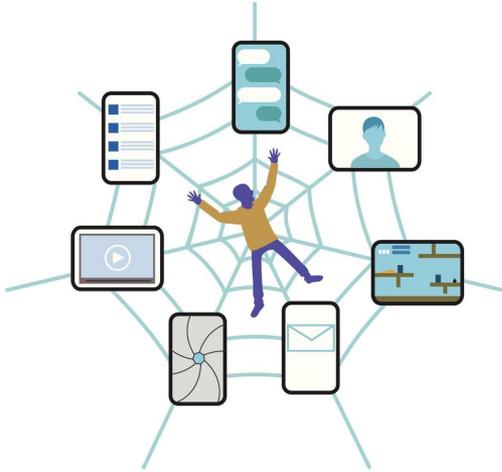
[video](#)

Sondage #2

Savez-vous ce qu'est
l'hyperconnexion ?



Risque pour la santé et la psychologie



- Les français passent en moyenne **4 h 22 par jour sur les écrans**, **67%** se disent addict à leur écran.
- L'hyperconnexion nuit en effet à la qualité du **sommeil**, est source de **stress** et favorise la **sédentarité** et les problèmes de santé qui vont avec (vision, poids).
- **Altération de l'image de soi**

Pour tous les goûts, mais motivés !

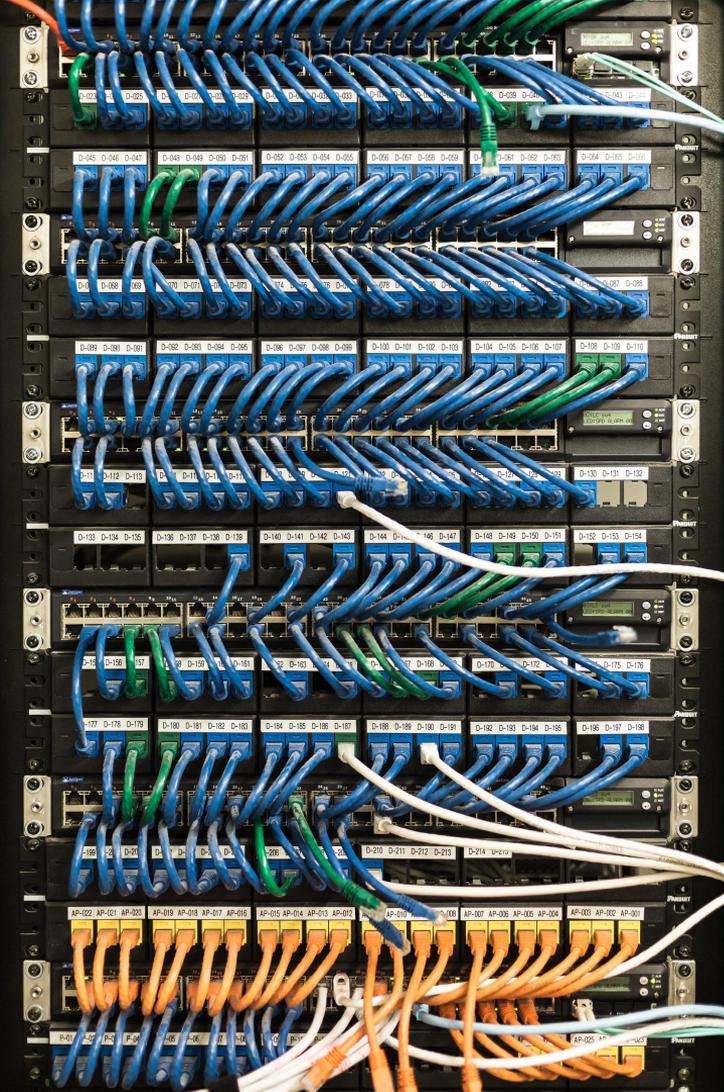
Secteur numérique =

900 000 emplois d'ici 2025 en Europe

Ce qu'il faut :

- aimer les ordinateurs
- ne pas avoir peur des chiffres ou des nouveaux langages
- aimer la logique
- être persévérant
- être créatif





Sondage #3



Quelle différence faites vous
entre Internet et le Web ?



Les rails, les trains et les gens dedans



- Internet - les gares et les rails
- Le World Wide Web (ou Web) - La SNCF

Et les gens dans les trains sont les contenus,
comme les données des sites par exemple !

Un domaine, plusieurs métiers

WEB, APPLICATIONS & CO



Front End

BackEnd

Développeur Fullstack

RÉSEAUX, INFRASTRUCTURES & CO



Développeur Objets connectés

- Technicien Assistance informatique
- Technicien Supérieur système et réseau
- Analyste cyberSécurité

Plein de “nouveaux métiers” ...

Cybersécurité

**Développeur
d'application**

**Technicien
Système & Réseau**

Data Scientist

E- Marketing

E-commerce

Communication Digitale



03

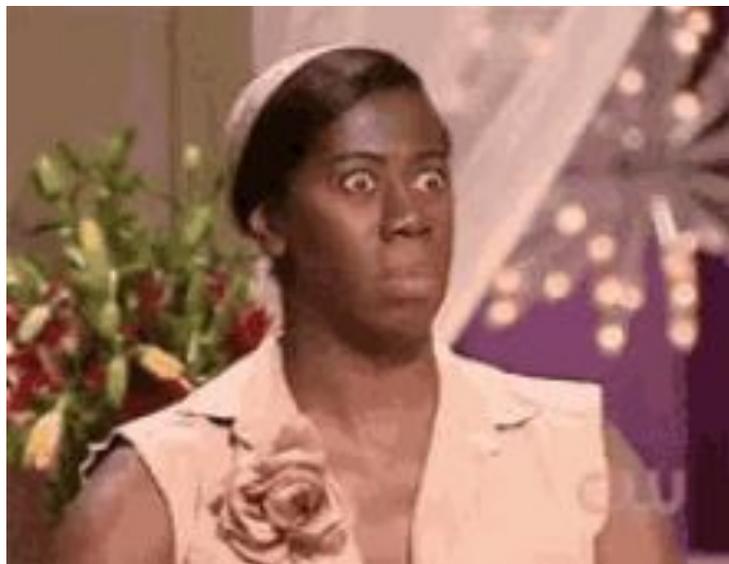
Femmes et numérique

Sondage #7

┌
**D'après-vous, parmi les
personnes travaillant dans le
numérique en France, quel est le
pourcentage de femmes ?**
└



Les réponses :



33%

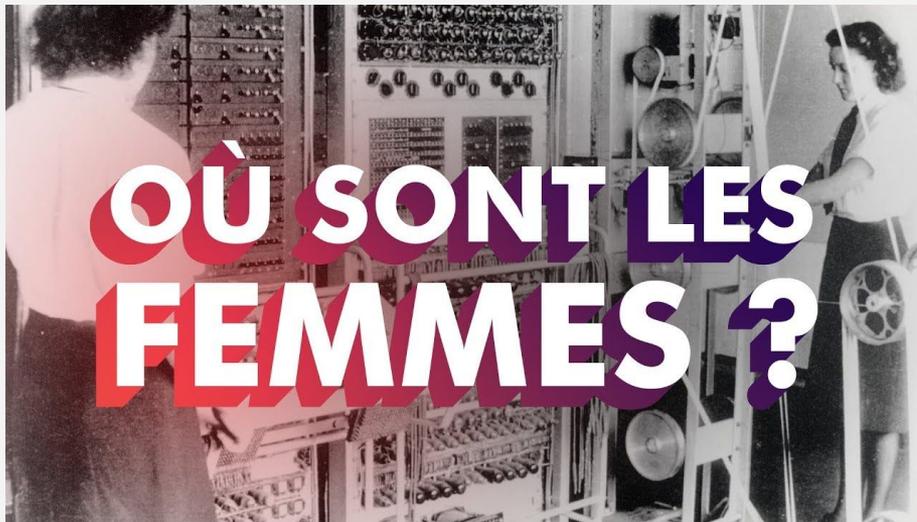
de femmes dans le secteur du numérique en France

15 %

de femmes dans les métiers dit techniques

(Développement, Exploitation, Production)

Pourquoi?



Surtout quand on sait que... [video](#)

ADA LOVELACE (1815 - 1852)



conçoit le 1er programme
informatique,
l'ancêtre de l'ordinateur



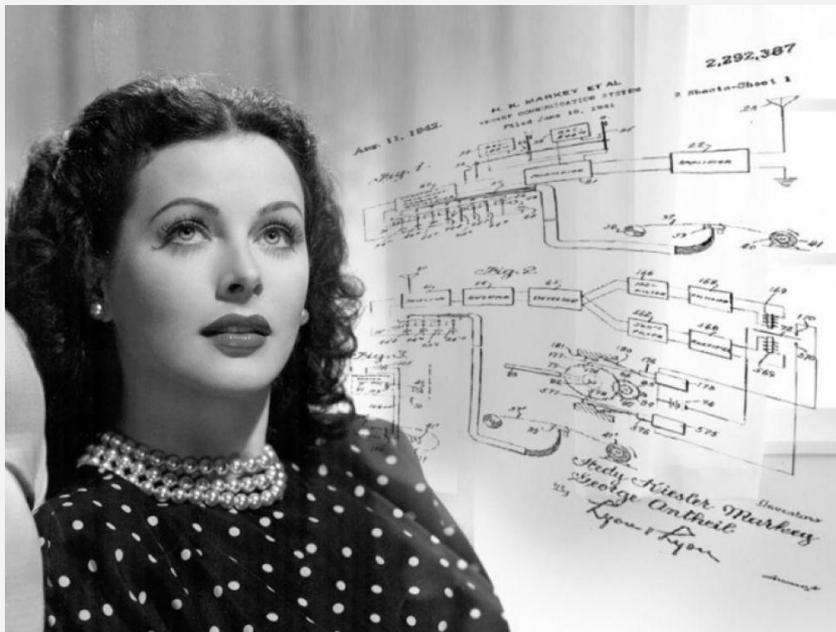
Grace Hopper (1906 - 1992)



**conçoit le premier
langage de
programmation**



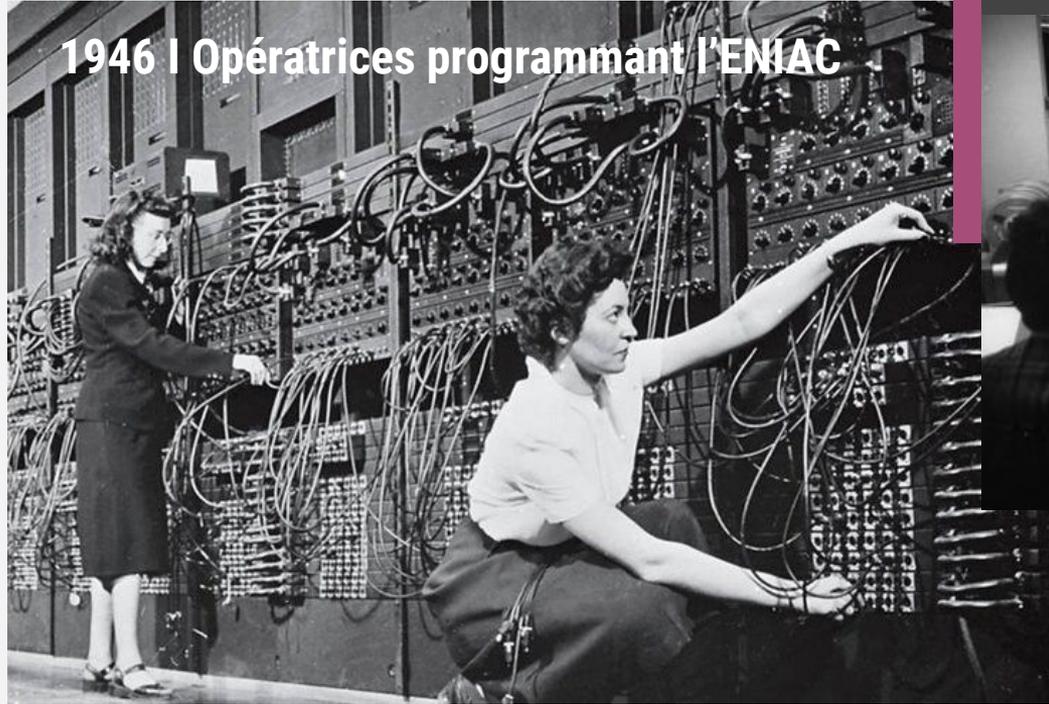
HEDY LAMARR (1914 - 2000)



conçoit l'ancêtre
du WIFI



À l'origine, l'informatique était un milieu...



Années 1950 - 1960 | Les bureaux d'IBM



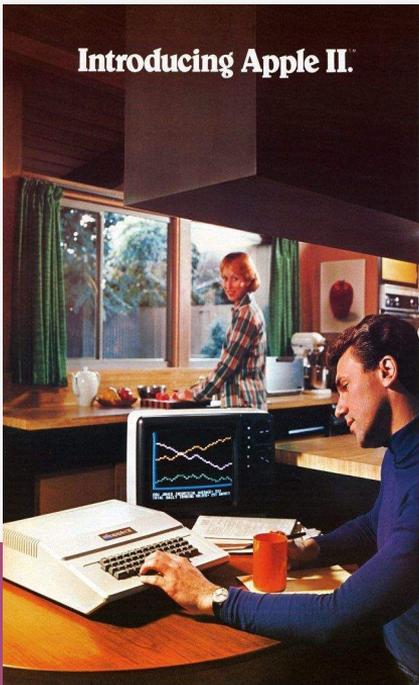
...majoritairement féminin

Katherin Johnson (1918 - 2020)



**participe à la mission
Apollo 11**

Mais l'arrivée du micro ordinateur transforme les représentations



Introducing Apple II.

The home computer that's ready to work, play and grow with you.

Clear the kitchen table. Bring in the color TV. Plug in your new Apple II and connect your standard cassette recorder/player. Now you're ready for an evening of discovery in the new world of personal computers.

Only Apple II makes it that easy. It's complete, ready to use computer—not a kit. At \$799, it includes features you won't find in other personal computers costing twice as much.

Features such as video graphics in 15 colors, built-in memory capacity of 8K bytes ROM and 4K bytes RAM—with room for lots more. But you don't even need to know a RAM from a ROM to use and enjoy Apple II. It's the first personal computer with a built-in version of BASIC—the English-like programming language—permanently built in. The means you can begin mastering your Apple II the first evening, entering your own instructions and watching them work, even if you've had no previous computer experience. The familiar typewriter-style keyboard makes communication easy. And your programs and data can be stored on and retrieved from audio cassettes, using the built-in cassette interface, so you can swap with other Apple II users. This and other peripheral—optional equipment on most personal computers, at hundreds of dollars extra cost—can be had with Apple II. And it's designed to keep up with changing technology, to expand easily whenever you use it.

As an educational tool, Apple II is a source of information. You can program it to take your children in most any subject, such as spelling.

history or math. But the biggest benefit—no matter how you use Apple II—is that your own family increase your familiarity with the computer itself. The more you experiment with it, the more you discover about its potential.

Start by playing PONG. Then invent your own games using the input board, game paddles and built-in speaker. As you experiment you'll acquire new programming skills which will open up new ways to use your Apple II. You'll learn to "paint" dazzling color displays using the unique color graphics commands in Apple BASIC, and write programs to create beautiful landscape drawings.

As you master Apple BASIC, you'll be able to organize, index and store data on household finances, income tax, recipes, and record collections. You can learn to chart your health habits, balance your checking account, even control your home environment. Apple II will go far as your imagination can take it.

Best of all, Apple II is designed to grow with you. As your skill and experience with computing increase, you may wish to add new Apple peripherals. For example, a refined, more sophisticated BASIC language is being developed for advanced scientific and mathematical applications.

And in addition to the built-in cassette interface, 8-inch floppy disk and game interfaces, there's a front panel eight-pin plug-in expansion slot for a proprietary board for communicating with interfaces to other equipment, a serial board for connecting teleprinter and other terminals, a parallel interface for communicating with a printer or another computer, an EPROM board for storing programs permanently, and a problem-based communications interface. A floppy disk interface with software and complete operating systems will be available at the end of 1977. And there are many more options to come, because Apple II was designed from the beginning to accommodate increased power and capability as your requirements change.

If you'd like to see for yourself how easy it is to use and enjoy Apple II, visit your local dealer for a demonstration and enjoy one of our

Apple II is a completely self-contained computer system with BASIC in ROM, color graphics, ASCII keyboard, light weight, efficient switching power supply and modifiable case. It is equipped with BASIC in ROM, up to 48K bytes of RAM, and with cassette tape, video and game I/O interfaces built in. Also included are two game paddles and a demonstration cassette.

SPECIFICATIONS

• **Microprocessor:** 6502 (1 MHz)

• **Video Display:** Memory mapped, 5 modes—all software-selectable

• **Text:** 40 characters line, 24 lines upper case

• **Color graphics:** 408 x 408, 15 colors

• **High-resolution graphics:** 2808 x 1820, black, white, violet, green

• **Both graphics modes can be selected to include a three-of-eight-bit at the bottom of the display area.**

• **Completely transparent memory access. All color generation done internally.**

• **Memory:** up to 48K bytes on-board RAM (4K supplied)

• **Uses either 4K or new 16K dynamic memory chips.**

• **Up to 12K ROM (8K supplied)**

• **Software**

• **Fast extended Integer BASIC in ROM with color graphics commands**

• **Executive monitor in ROM**

• **I/O**

• **1500 pins cassette interface**

• **8-inch floppy disk interface**

• **Apple game I/O connector**

• **ASCII keyboard port**

• **Speaker**

• **Composite video**

• **Serial interface**

• **Parallel interface**

• **EPROM board**

• **Problem-based communications interface**

• **Floppy disk interface**

• **Game interface**

• **Apple II is also available in hard-copy form for the do-it-yourself hobbyist. Has all of the features of the Apple II system, but does not include case, keyboard, power supply or game paddles. \$358.**

• **PONG is a trademark of Atari.**

• **Apple II plugs into any standard TV using an intermediate module (not included).**

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A Great Christmas Bonus from Radio Shack

The New Tandy 1000 EX

Complete with our Color Monitor

...at no extra charge.

Save \$799⁹⁵



apple computer inc.

apple II history



**Hour of Code !
Initiation à la
programmation
informatique**

C'EST QUOI MINECRAFT ?

Minecraft, c'est le fameux jeu de type *bac à sable*. On incarne un personnage principal qui utilise tout autour de lui des ressources (minérales, animales, végétales...) et qui les transforme en les manufacturant.



L'INTERFACE

The screenshot shows the Scratch/Minecraft Studio interface. At the top, there is a browser address bar with the URL `https://studio.code.org/s/mc/stage/1/puzzle/5` and a search bar labeled "Rechercher". Below the browser bar is a teal header with the text "Heure de Code Minecraft" and a progress indicator showing 5 out of 14 levels completed. The number "5" in the progress indicator is circled in black. The main interface is divided into three panels: a stage view on the left, a blocks palette in the middle, and a workspace on the right. The stage view shows a Minecraft scene with a character and a small structure, with a white circle containing the number "1" overlaid. Below the stage view is a yellow "Démarrer" button with a white circle containing the number "2". The blocks palette contains several blue and pink blocks, with a white circle containing the number "3" overlaid. The workspace shows a script starting with a yellow "quand l'exécution commence" block, followed by a pink "répéter 4 fois" block containing a pink "faire" block, with a white circle containing the number "4" overlaid. At the bottom left, there is a language dropdown menu set to "Français" and a footer with "Politique de confidentialité" and "Copyright | Plus".

1. La scène
2. L'objectif de niveau
3. La bibliothèque d'action
4. La zone de travail
5. Les 14 niveaux

MAINTENANT, A VOUS DE JOUER !



C O
D E

Heure de Code Minecraft 1 J'ai fini mon Heure de Code Connexion ? ☰

MINECRAFT

Consignes

Ajoute une deuxième commande « avancer plus » pour atteindre le mouton.

Blocs Espace de travail : 2 / 3 blocs Recommencer <> Afficher le code

- avancer plus
- quand l'exécution commence
- avancer plus
- tourner à gauche ↶
- tourner à droite ↷

Démarrer

Besoin d'aide ?
Regarder les vidéos et les indices

Clique sur « Exécuter » pour tester ton programme.

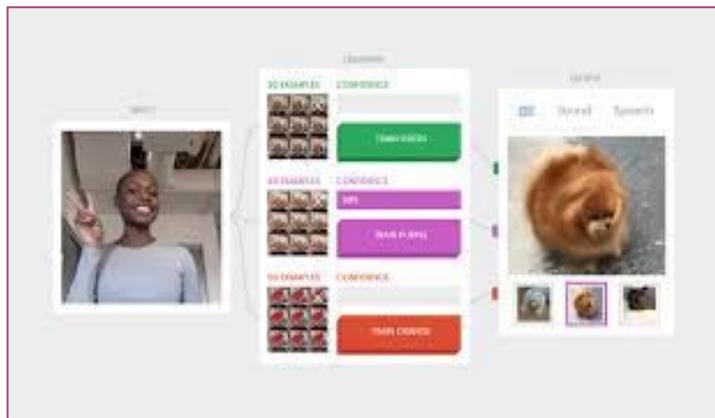
<https://studio.code.org/s/mc/stage/1/puzzle/1>



**CET ATELIER VOUS
A PLU ?
ENVIE DE CONTINUER ?**



Je participe à un atelier **100% IA**



www.intrepidesdelatech.org



Je rejoins la **communauté** en ligne



<https://www.jobirl.com/groupes/les-intrepides-de-la-tech>

Intrépides de la Tech

MERCI et A BIENTÔT !



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Avec le soutien de :

