

Learning to code without a computer may seem impossible, but it makes perfect sense, especially for kids that do not have access to a computer at home during school closures. More than anything, learning to code requires a lot of analytical thinking and problem-solving. You can play coding games and complete coding activities for kids that can teach concepts without ever looking at a screen.

As of March 25, 2020, <u>Education Week</u> estimates at least 114,000 public and private schools in the United States are closed, or were closed and later reopened. These school closures have affected at least 52.6 million school students.

As a parent or teacher, you may be scrambling if your students do not have access to a computer. Luckily, teachers have taught for generations without the use of the internet. With most kids getting their education from home, we wanted to provide free coding activities for kids through familiar mediums that are readily available during these trying times and make sure they are advancing in their studies.

We've created 7 free coding activities for kids that you can add to your homeschool curriculum to teach the basic principles of coding. It includes fun, kid-friendly favorites like a coding word search and a coding crossword puzzle. You can also use our printable worksheets to teach kids about algorithms, ASCII codes, and bubble sorting. Give your students a foundation in metacognition, problem-solving, and abstract thinking.

We are here for you,



Binary codes for English alphabets (A - Z)

	,		,
A 01000001	B 01000010	C 01000011	D 01000100
E	F	G	H
01000101	01000110	01000111	01001000
01001001	J	K	L
	01001010	01001011	01001100
M 01001101	N	O	P
	01001110	01001111	01010000
Q	R	S	T
01010001	01010010	01010011	01010100
U	V	W	X
01010101	01010110	01010111	01011000
	Y 01011001	Z 1011010	

In the space given below, write your name or anything else in the binary code?



Write down the algorithm(steps) for each activity in the space given.

The first one is done for you.

The first one is done for year.
Making a lemonade (solved) Step 1: Cut Lemon in Half
Step 2: Squeeze the Lemon in a container
Step 3: Add water to it and stir
Step 4: Add sugar to it and stir
Step 5: Add ice cubes
Step 6: Serve it in a fancy glass
Driving a car

Opening the door	
Launching a rocket	



Fun Family Activity

- 1) You will need to make a group of 5-6 people.
- 2) Make one horizontal line per group, with each person facing forwards.
- 3) The goal is to sort this line height-wise; the shorter person should be on first and the taller person at the end of the line.
- 4) Compare the height of the first two:
 - a) If the height of the first student is greater than the second: Swap the positions
 - b) If the height of the second student is greater than the first: Move to step 5
- 5) Repeat the above process with the second and the third student in line.
- 6) Keep repeating steps 4 and 5 until we reach the end of the line.
- 7) After we reached the end of the line, start Step 4 again from the first student.
- 8) Keep repeating it until we have a sorted list with the shorter person on first and taller at the end.



Word Scramble

SMEUO	(Input device to control pointer)
FTASRWEO	(Intermediate b/w user and hardware)
EAYBDOKR	(Input device to type something)
NERNIETT	(Powers all the websites)
MORNITO	(Input device to display something)
GSAME	(Something we play for enjoyment)
ICOAIPAPLTSN	(A software program for end-user)
OPSOESRCR	(Brain of the computer)
IMFOCTORS	(Company founded by Bill Gates)
AADT	(Processed information)
IPUNT	(data sent to a computer)
MEMYRO	(Storage area)
RAAEHWRD	(Physical parts of computer system)
MRNPAGOGIMR	(Instruction given to the computer)
TKNWOER	(Group of two or more devices linked together)
PLTPAO	(Portable computer)
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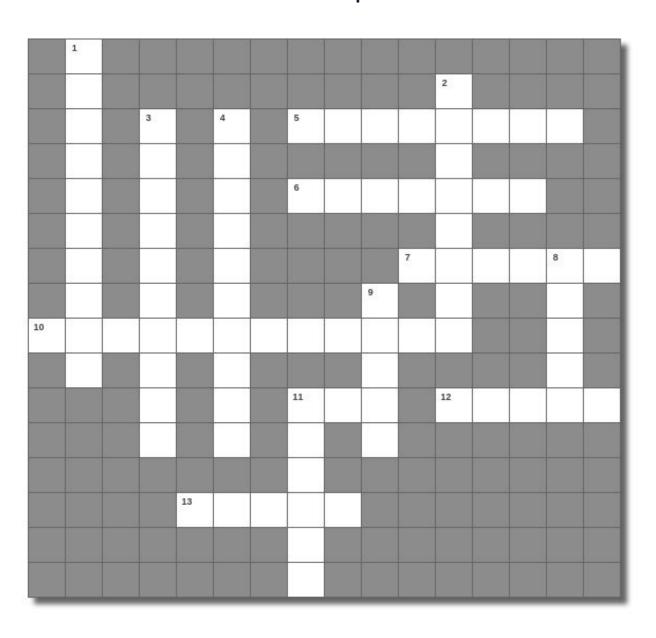
Word Maze

N	С	М	0	N	I	Т	0	R	Т	Α	S	S	T
C	F	0	L	D	Ε	R	S	С	C	Ε	Υ	E	P
Α	S	G	I	Н	Т	F	Α	E	E	I	E	Α	R
R	Ε	K	Α	Ε	P	S	Α	L	٧	F	K	R	I
S	C	Р	U	Α	D	Α	Т	c	G	С	D	c	N
В	Т	Т	G	S	N	Е	0	S	E	Α	S	Н	T
Ε	0	F	N	Т	Α	В	L	Е	E	В	М	0	Ε
M	0	U	S	Ε	N	Е	E	R	C	S	0	Ε	R
В	В	S	Α	Е	R	Α	W	Т	F	0	S	0	S
N	Е	Е	0	Α	T	S	С	Α	N	D	I	S	K
0	R	0	I	Α	D	R	N	E	E	N	R	Е	В
T	0	S	D	Т	V	Α	N	C	Т	E	U	D	K
Ε	Ε	L	Т	L	D	S	N	0	С	I	S	N	Т
S	T	Ε	N	R	Ε	T	N	I	М	С	В	I	K

CPU MOUSE **FACEBOOK** SCANDISK DVD **SPEAKER** SOFTWARE **FOLDERS PRINTER** TABLE GAMES MONITOR **KEYS REBOOT** INTERNET **SEARCH ICONS** NOTES **SCREEN USB**



Crossword puzzle





Hints for the Crossword puzzle

Clues Across

5	used for typing commands
6	Computer screen
7	Portable touch computer screen
10	Helps you find things online (2 words)
11	the brain of a computer
12	used to connect things to a computer
13	device that moves the cursor

Clues Down

1	listening device worn on ears
2	computer programs
3	another name for memory stick (2 words)
4	device for recording sound
8	electronic letter or message
9	malicious software program
11	can be moved around the screen



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Vocabulary Definitions
Mouse
Software
Keyboard
Internet
Monitor
Games
Applications
Processor
Microsoft
Data
Input
Memory
Hardware
Programming
Network
Laptop

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C	F	0	L	D	Ε	R	S	С	C	Ε	Υ	Ε	Р
Α	S	G	I	Н	T◀	F	A	E	E	Ι	E	Α	R
R	Ε	K	Α	Е	Р	S	A	L	V	F	K	R	Ι
S	С	P	U	Α	D	Α	T	C	G	C	D	С	N
В	Т	Т	G	S	N	E	0	S	E	A	S	Н	Т
E	0	F	N	Т	Α	В	L	Е	E	В	M	0	Е
M	0	U	S	Ε	N	Ε	Ε	R	С	S	0	E	R
В	В	S	Α	Е	R	Α	W	Т	F	0	S	0	S
N	Ε	Ε	0	Α	T	S	С	Α	N	D	I	S	K
0	R	0	I	Α	D	R	N	E	E	N	R	Ε	В
T	0	S	D	T	V	Α	N	C	Т	Ε	U	D	K
Ε	Ε	L	T	L	D	S	N	0	С	Ι	S	N	T
S	Т	Ε	N	R	Ε	T	N	Ι	М	С	В	Ι	K

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	D		L		I						F				
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	H		S		R						W				
	0		H		0					T	A	B	L	E	T
	N		D		P				V		R			M	
1 S	E	A	R	C	H	E	N	G	I	N	E			A	
	S		I		0				R					I	
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			E		E		U		S						
							R								
				¹M	0	U	S	E							
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