

CS50 presents

# **CS50x Puzzle Day 2017**

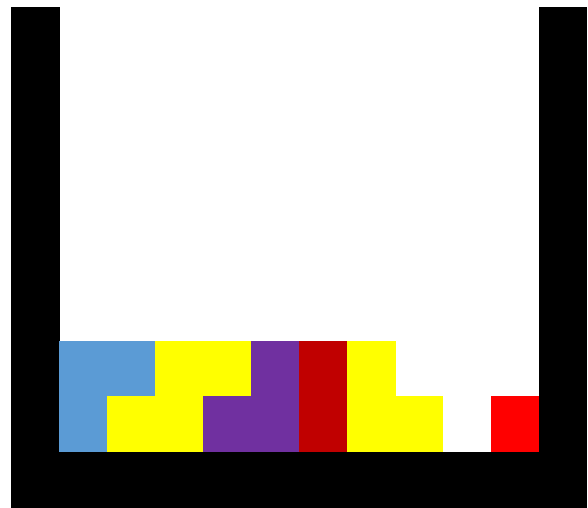
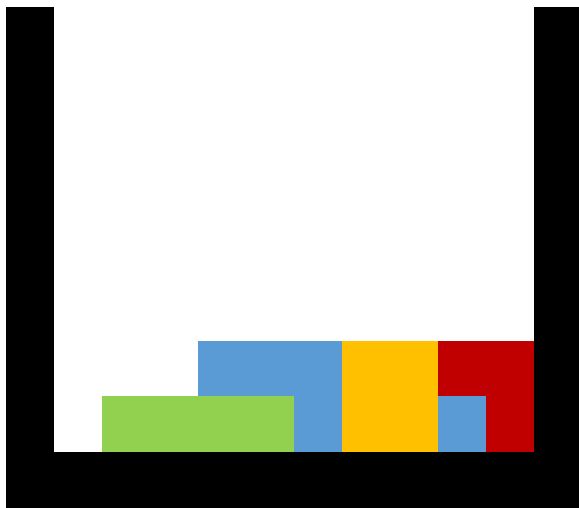
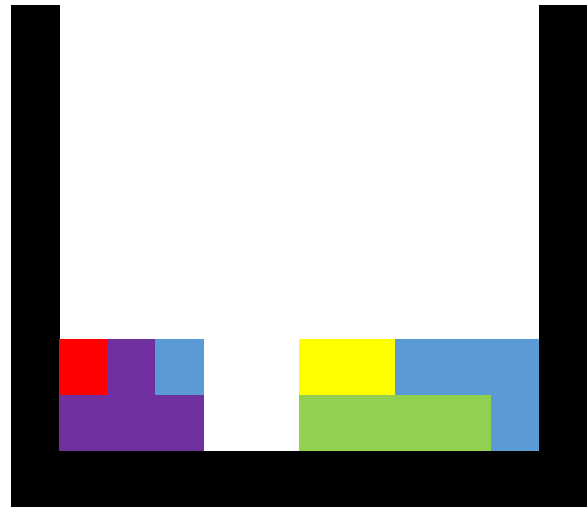
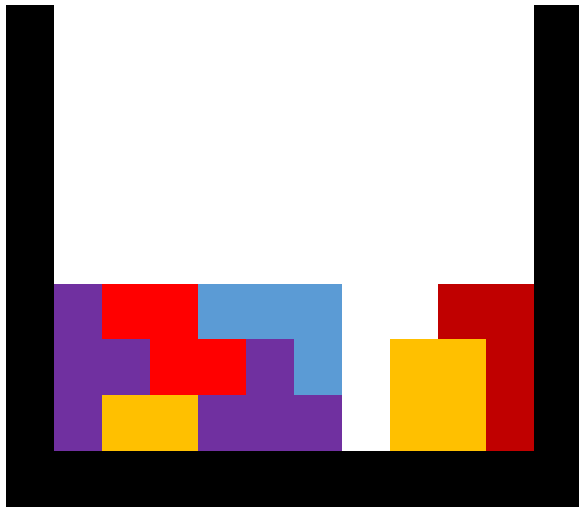
*with special thanks to our friends at Facebook*

**March 31 – April 3, 2017**

- This packet contains 8 puzzles, all 8 of which are independent of one another.
- The answer to each puzzle is a single word or name in English.
- You may use the Internet and any other resources at your disposal.
- You are encouraged (but not required) to work on a team with 1, 2, or 3 classmates or friends, either in person or online.
- Have fun and good luck!

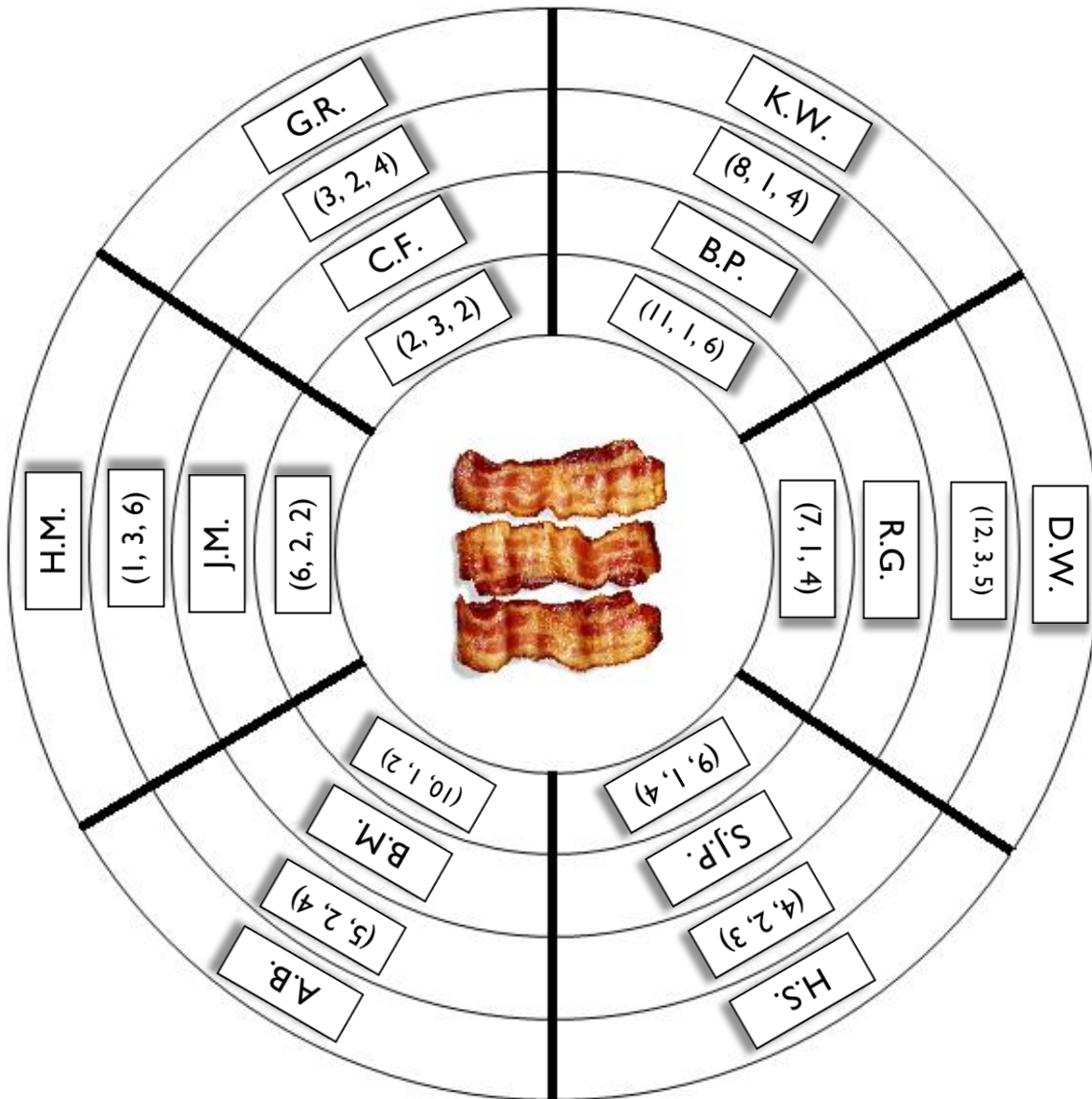
*Special thanks to Matthew Warshauer of Facebook, who generously allowed us to share these puzzles. Puzzles #1, 5-8 written by him. Puzzle #3 is a modified version of a puzzle originally written by him.*

## #1: We All Fall Down



Answer: \_\_\_\_\_

## #2: Two Degrees



Answer: \_\_\_\_\_

### #3: Look Up

			Louis Armstrong	U.S.A.
			Juscelino Kubitschek de Oliveira	Brazil
			Rick Husband	U.S.A.
			Amado Nervo	Mexico
			Tenzing Norgay, Sir Edmund Hillary	Nepal
			John August Earl Bergstrom	U.S.A.
			Ben Elbert Douglas, Sr.	U.S.A.
			Guadalupe Victoria	Mexico
			Vicente Almandos Almonacid	Argentina
			William Mitchell	U.S.A.
			Edward Lawrence Logan	U.S.A.
			Francisco Bangoy	Philippines
			William P. Hobby	U.S.A.
			Abelardo L. Rodríguez	Mexico
			Luis Muñoz Marín	Puerto Rico
			Abraham Lincoln	U.S.A.
			Sukarno, Mohammad Hatta	Indonesia
			Albert Bond Lambert	U.S.A.
			John Wayne	U.S.A.
			Charles McGhee Tyson	U.S.A.

Answer: \_\_\_\_\_

## #4: Chemdoku

Think **old**, not new!

	5	1			<sup>10</sup> 7		3	
6	<sup>1</sup>	7						
					1		5	6
1		5			<sup>4</sup> 9			7
2	7						9	4
4		<sup>7</sup>	5		<sup>12</sup>	3		1
5	4	<sup>6</sup>	1		<sup>3</sup>			
	<sup>5</sup>					8		5
	6		3			9	1	

(NB: In this one, the pink boxes are connected)

7				6	8	9	<sup>8</sup>	
		8	<sup>2</sup> 9					
2	<sup>14</sup>			4		3		
9	2	3	4				5	
	8						<sup>11</sup> 4	
	4			<sup>9</sup>	3	1	2	9
		6		8				7
					4	8		
		2	7	9		<sup>13</sup>		4

Answer: \_\_\_\_\_

**#5: Taste the Rainbow**

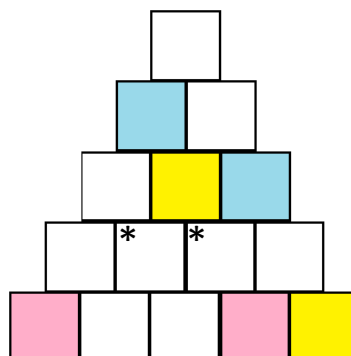
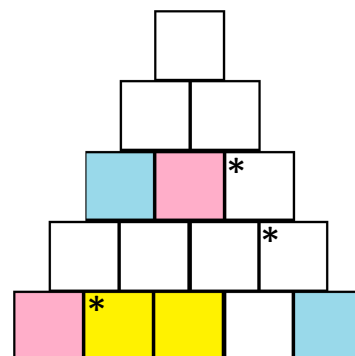
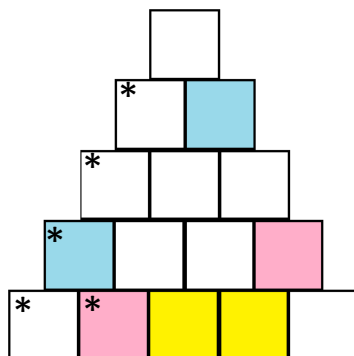
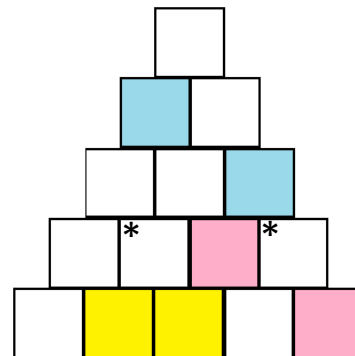
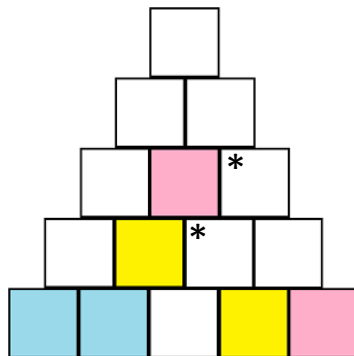
goldfish	lobster	emerald	ruby
garfield	frog	jack o'lantern	sapphire
denim	sun	ocean	santa claus
grass	dory	nemo	sky
charmander	cardinal	target	stop sign
cookie monster	oriole	jade	twitter
cobalt	rubber duck	tiger	leprechaun
basketball	blood	yoshi	traffic cone

Answer: \_\_\_\_\_

## #6: Stacked

Within each stack:

- Each box has a positive integer.
- The bottom row can only contain the numbers 1 through 9.
- Each box is the sum of the two boxes below it.
- All boxes contain a unique number *EXCEPT* if colored (then those two share the same number, distinct from all the white and other-colored boxes).



Answer: \_\_\_\_\_ A \_\_\_\_\_

## #7: The Next Unicorn

Everyone's looking for the next big thing in tech, but these companies think they've nailed it by making the last big thing a little better. Can you discover the identity of the venture capitalist who funds them?

1	This is your one-stop shop for headgear for scientists, swimmers, or pilots. (6)
2	Are you a parent dealing with spit-up and vomit? This gadget uses compressed gas to deflect particles so your baby remains nice and clean. (6)
3	Want to feel like you're on stage at Carnegie Hall? This virtual reality app puts the user square in the middle of the brass section of the symphony, where you can play along with the pros. (7)
4	This app allows you to follow along with the U.S. Supreme Court in real time, though its name has been out of date since February 2016. (4)
5	Spend half your life waiting for a streetcar? With this on-demand service, never wait again! Just push a button and a trolley will show up immediately, ready to take you wherever you want to go. (9)
6	This app shows you the location of nearby tornadoes. (7)
7	This Peter Pan simulator allows you to encounter his arch-enemy head-on. (8)
8	Ever have trouble getting your tiny items in a row? This app will arrange objects too small for a human to see into the desired order. (9)
9	This app allows you to pretend to be someone who mends things (as opposed to a tailor, soldier, or spy). (6)
10	British elevator enthusiast? This is the app for you. (4)
11	This app allows you to find a friend who is into the same thing you are: cast iron skillet. (6)
12	This company is betting on the internet of things: they make electronic purses, satchels, and backpacks. (4)

Answer: \_\_\_\_\_



**#8: Rock, Steel, and Ice**

*You've bit off more than you can chew. You're not usually one to zero in on the problem, but it might've been a bad idea to explore this island cave without a light. Stumbling forward in the dark, you wonder what you'll find...*

63

37

20

55

19

0

Answer: \_\_\_\_\_