

Computational Thinking for Students: Day One

Complete the following questions and submit the answer sheet.

Question One:

Algorithms



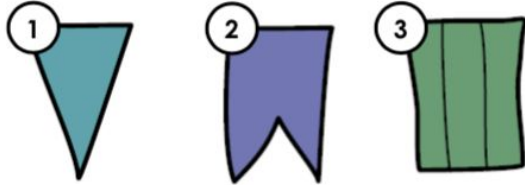
Flags

5

During a birthday celebration the room is decorated with flags.



Which flag is going to be added next?



Question Two:

Algorithms

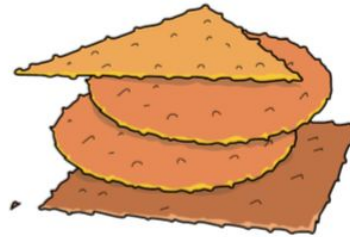


Robot and cookies

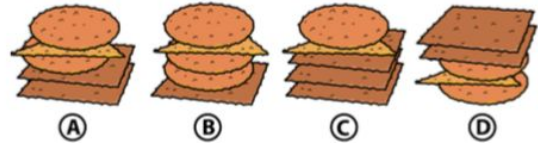
7

A robot recognises several geometric shaped cookies: square, circle and triangle. We are going to mark them with S, C and T.

The robot knows a command PUT – puts a cookie on another one. When the robot finishes the commands PUT S PUT C PUT C PUT T, a pile of cookies looks like this:



What will the pile of cookies look like when the robot finishes the commands: PUT S PUT S PUT C PUT T PUT C?



Question Three:

A group of friends, two women (Alice and Babs), and two men (Zach and Yabu), like to pair up to go out on dates to cool restaurants. There are four combinations they date in (Alice-Zach, Alice-Yabu, Babs-Zach and Babs-Yabu). The favourite restaurant of one of the men and one of the women is a place called Quonk. However if those two eat together they always try new restaurants as do the other pair if together. Therefore when exactly one, and only one, of the particular man and woman in question is on a date they eat at Quonk. When Alice goes out with Zach they go to Quonk.

Which, if any, other pair from those below eat at Quonk:

- 1) Alice and Yabu,
- 2) Babs and Zach,
- 3) Babs and Yabu, or
- 4) none of the other pairs eat at Quonk?

Question Four:

Convert the binary word 000 into the binary word 100 in 7 steps or less. You must only change one bit of the word on each step. You may only use 1s and 0s.

0 0 0

1 0 0

Question Five:

A jigsaw puzzle contains 500 pieces. A “section” of the puzzle is a set of one or more pieces that have been connected to each other. A “move” consists of connecting two sections. What is the minimum number of moves in which the puzzle can be completed?

Computational Thinking for Students:

Answer Sheet: Day One

Take a photo or scan this page

File format: Name - Day One

Name:	
School:	
Question:	Answer:
One	
Two	
Three	
Four	
Five	
Rating	☆☆☆☆☆