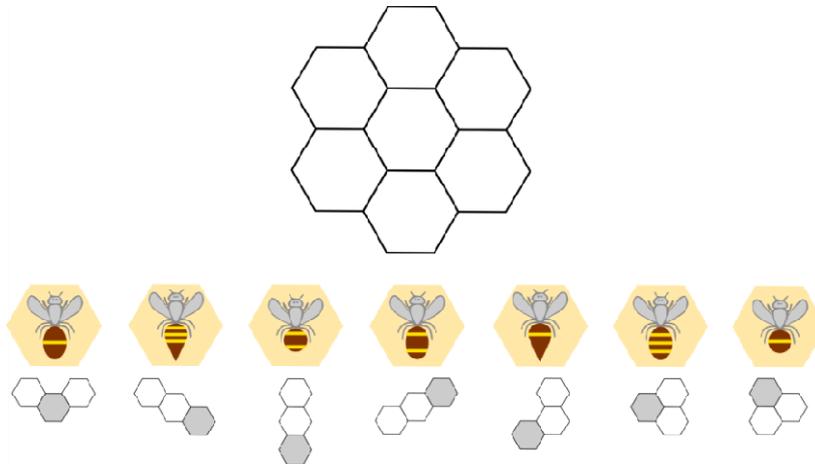


TASKS T1 – T7 CARRY 3 POINTS EACH

T1. BEE HIVE

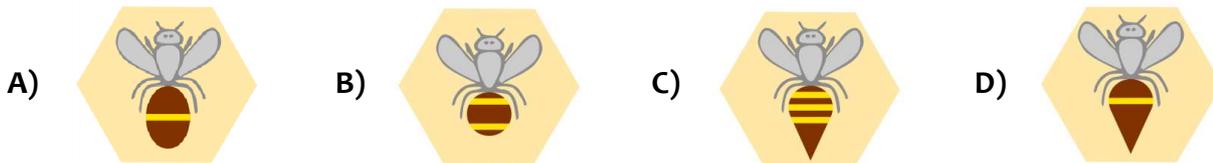
Beaver needs some help to place the bees in the hive.



Below each bee a rule is shown: The bee must be put in the gray cell.

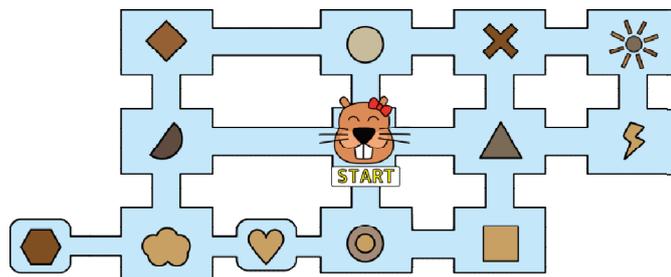
Question / Challenge

Which of the bees can be placed in the lower-right spot?



T2. WHERE IS BEAVER?

Bibako wants to move from the START room to Be-taro's room
Bibako uses a map of rooms.
On the map, each room is marked by a picture.



Bibako moves by the following arrow sequence:



Each arrow tells Bibako in which direction to move from one room to the next.

Question / Challenge

Which picture is Be-taro's room marked by?

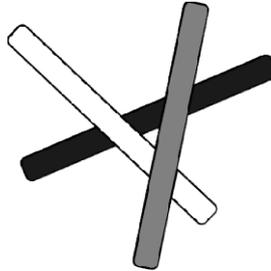


T3. PICK-UP STICKS

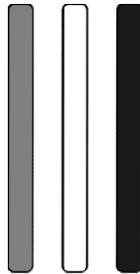
Ana is playing the pick-up sticks game. She drops some sticks on a table, and then picks them all up according to the following rules:

- pick up one stick at a time
- only pick up a stick if no other stick is covering it

For example, if she drops 3 sticks like this:



She has to pick them up in this order:

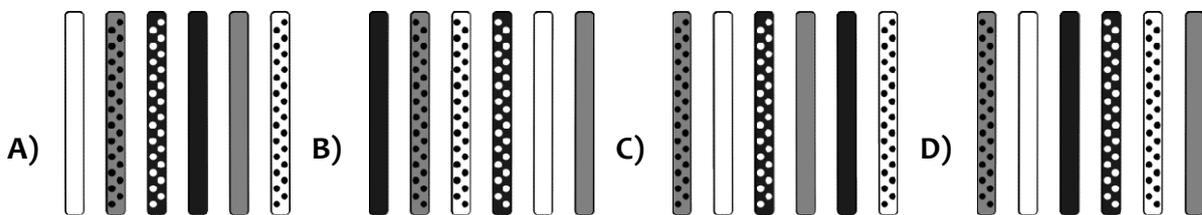


Question / Challenge

Ana dropped 6 sticks like this:



In which order should she pick them up?



T4. JUMPING GAME

Small Verunka loves jumping. She has found 17 tiles in a line and made a game plan from them.

Verunka puts a coin to the one end of a line and then stands on the opposite end, facing to the coin (look at the picture).

She wants to jump to every tile in a line using the following rules:

- If you are standing on a tile marked “X”, jump 3 tiles forward
- If you are standing on a tile marked “O”, jump 1 tile backward



Question / Challenge

Which of the game plans will bring her to the coin?

- A) C) B) D)

T5. SHOPPING

At the beavers' shop from The Valley the pieces of tree bark are packed in packages of 2, 4 and 8 identical pieces.



Question / Challenge

Mother beaver wants to buy 20 pieces of bark. What is the fewest number of packages that she has to buy in order to get the 20 pieces of bark?

- A) 2 B) 3 C) 4 D) 5

T6. PUT YOUR SHIRTS AWAY!

Puffy has a pile of six clean shirts on her bed. She has to put them into her four drawers. She takes one shirt at a time from the top of the pile, and puts it into a drawer. She starts with the top drawer, then uses the second from the top, and so on. When she has put a shirt into the bottom drawer, she starts again from the top.



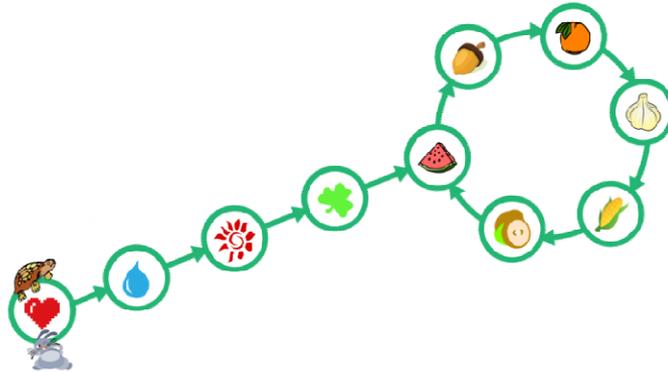
Question / Challenge

Into which drawer will she put the last shirt?

- A) B) C) D)

T7. TORTOISE AND HARE

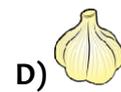
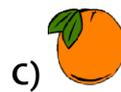
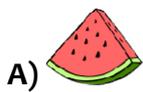
A tortoise and a hare are trying to race against each other in the track shown below:



They both start at the same time in the field with a heart in it and they follow the direction of the arrows on the track. The tortoise moves one field every minute. The hare moves two fields every minute.

Question / Challenge

What is in the field where the tortoise and the hare meet for the first time after the start?



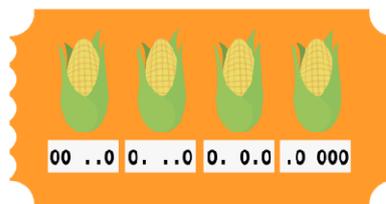
TASKS T8 – T14 CARRY 4 POINTS EACH

T8. GOLDEN TICKET

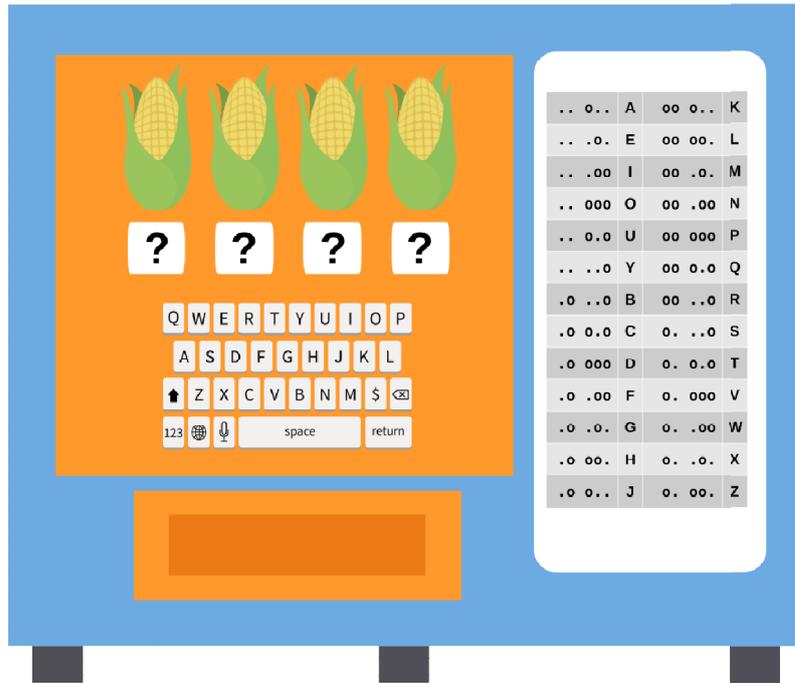
María, the armadillo, has a golden ticket that is worth four corn. Together with Juan, the capybara, they go to the vending machine to redeem it.



On the way, they look at the ticket, but do not understand the code on it.



When they see the code table on the vending machine, everything becomes clear: They will have to figure out what four letters are encoded on their ticket.



Question / Challenge

What four letters should they enter to get their corn?

- A) TVRZ
- B) RSTD
- C) RSZX
- D) WJTD

T9. LEARN TRADITIONAL ART

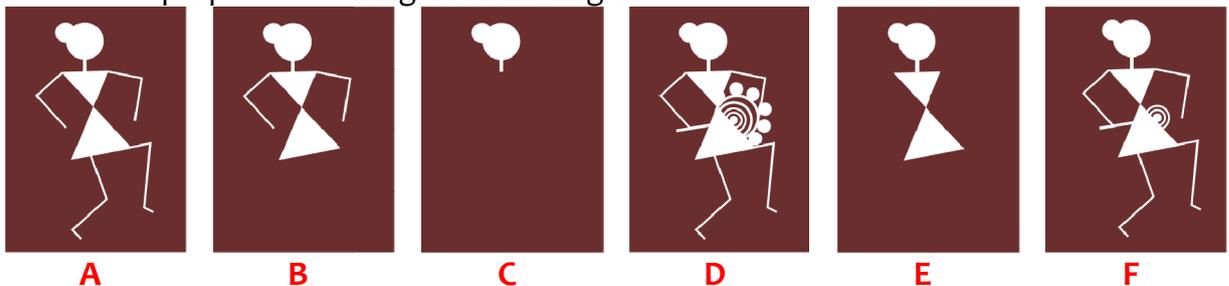
Deepa is learning Warli painting. With the help of some cards, she wants to create the following picture:



She has to follow the step-by-step instructions shown on the cards, but she dropped them and now they are all mixed up!

Question / Challenge

What is the proper order using the following cards?

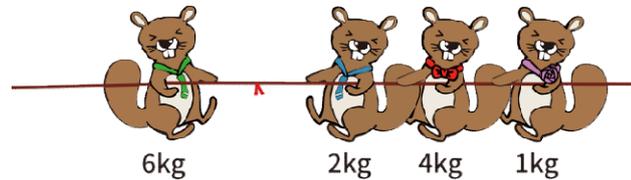


- A) CEABFD
- B) CEBAFD
- C) EBADCF
- D) AFDEBC

T10. TUG OF WAR

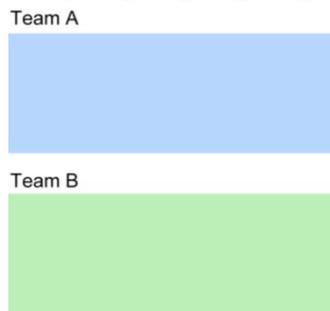
Beaver School is having a tug-of-war competition. In order to have a fair competition, the school will divide all participating beavers into teams based on their weight. The goal is to have the **weight difference** between these two teams be **as small as possible**.

Take the following figure as an example: the **weight difference** between these two teams is only 1 kg.



Question / Challenge

Today five beavers sign up for the competition. Which is the proper division so that the **weight difference** between the two teams would be as small as possible?



A) Team A: 1kg, 4kg, 5kg; Team B: 4kg, 9kg

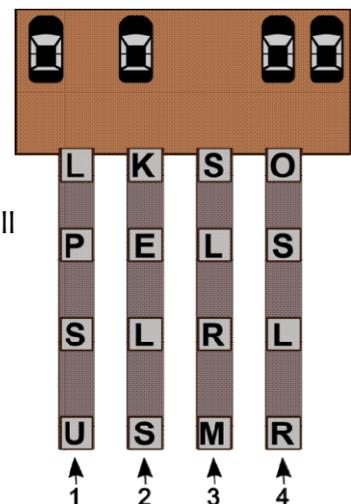
B) Team A: 1kg, 4kg, 9kg; Team B: 4kg, 5kg

C) Team A: 5kg, 9kg; Team B: 4kg, 1kg, 4kg

D) Team A: 1kg, 5kg, 9kg; Team B: 4kg, 4kg

T11. CAR PLATE

In the parking garage there is a security system that scans the car license plate. A gate opens if the character on the gate is somewhere on the license plate. Each lane has 4 gates.



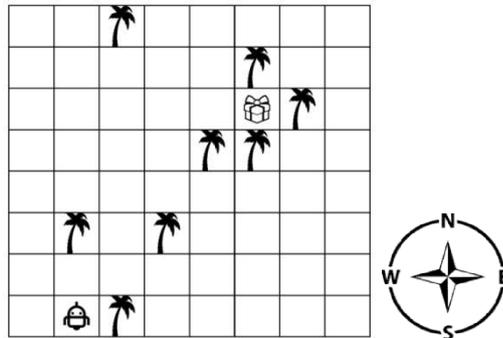
Question / Challenge

What car license plate includes the characters that can open all gates on a lane to enter the parking garage?

- A) **MSLUK**
- B) **RPSML**
- C) **UMETS**
- D) **SOMTR**

T12. A GIFT BEHIND TREES

Robby the Robot wants to go get his gift. But there are trees in the way. Robby can move in one of the four cardinal directions (North, South, East, West). Because he is a robot, he has to plan his movements before he makes any moves.



Question / Challenge

Which of the following plans will allow Robby to get his gift without hitting any trees?

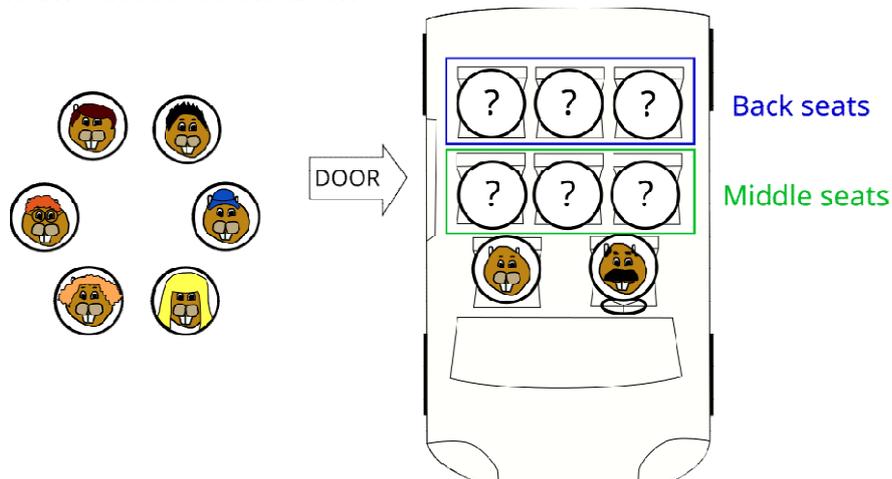
- A) NENNEENWWNNESE
- B) NENESEENWNWWNNEEE
- C) NENSEENNWWNNEEE
- D) NENSEENWNWWNNEEE

T13. CARPOOL

At the end of a school day, Beaver Jack’s dad offered to take six of Beaver Jack’s schoolmates home with his car because, luckily, in their way home they pass near the homes of the other six beavers.

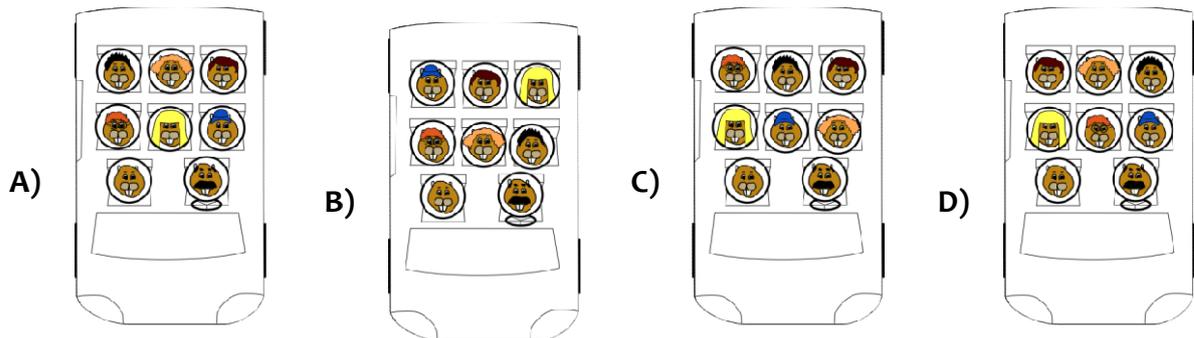
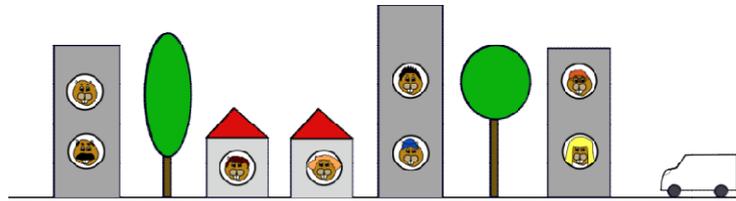
However, they need to think about which beaver should take which seat in the car so that they cause as little discomfort as possible when they reach a beaver’s home and the beaver gets off the car. In case two beavers live in the same building, it doesn’t matter in which order they get off the car.

The car has 2 front seats, 3 seats in the middle and 3 seats in the back. The two front seats are occupied by Beaver Jack and his dad. They will exit the car last. For the other rows (middle seats and back seats), because the car only has one door on one side, the ideal order of exiting the car is the one in which all beavers in the middle seats exit the car first, and then the ones in the back. Also, in each row of seats, the first beaver to exit the car should be the one closest to the door.



Question / Challenge

Given the following order of houses where each of the beavers live, which one of the following is an ideal placement of the beavers in the car so they cause as little discomfort as possible when each of them reaches his home and leaves the car?



T14. BIRTHDAY PARTY

Little Beaver is planning a birthday party. He makes a to-do list with tasks to be done before the party. (shown below)

To-Do List	Making sure how many people are coming	Buying snacks	Picking a date	Estimating the cost	Choosing a Venue
Prerequisites for the task above			none		

He realizes he needs to complete some tasks before he can carry out other tasks. For example, before counting all the people that are coming, he needs to pick a date first.

Question / Challenge

Of the following options, which is the correct order to complete the tasks?



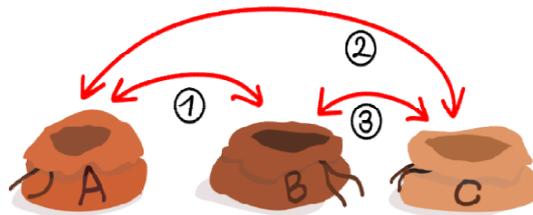
TASKS T15 – T21 CARRY 5 POINTS EACH

T15. LILA'S GUESSING GAME

Lila and her friends are playing a guessing game. To start the game, Lila puts a marble in Bag A, a gem in Bag B, and a crumpled piece of paper in Bag C.



She then asks her friends to close their eyes. While their eyes are closed she mixes up the contents of the bags. First, she switches the items in bags A and B. Then, she switches the items in bags A and C. Lastly, she switches the items in bags B and C.



Question / Challenge

In which bag will the marble and the gem end up?

- A) A & C
- B) B & A
- C) C & B
- D) A & B

T16. FOREST PARTY

Betty Beaver, Fiona Fox, and Bobby Bear are having a party. The table shows which foods each friend can eat.

	Leaves	Fish	Mushrooms	Berries
Betty Beaver	Yes	No	No	Yes
Fiona Fox	No	Yes	No	Yes
Bobby Bear	No	Yes	Yes	Yes

They have nine food portions at the party. Each friend should get three portions of food.



Question / Challenge

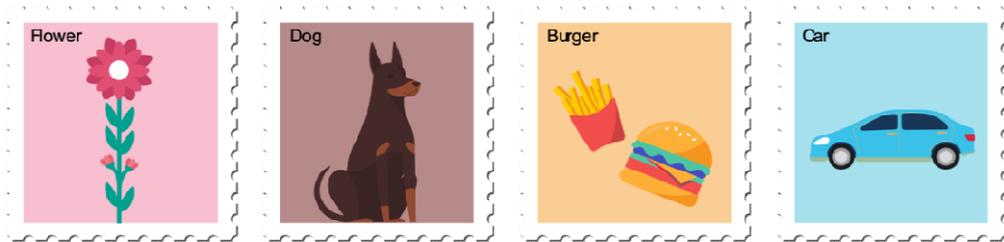
Which food should the bear eat at the party?

- A)
- B)
- C)
- D)

T17. STICKER COLLECTION

Four kids collect stickers of things they like. Each kid likes only one thing. They want to share four new stickers so that each kid gets a sticker that fits his collection.

- Ajay does not like cars but loves snacks.
- Divya does not like flowers.
- Ram exchanged his car sticker with Divya.
- Seema is an animal lover.



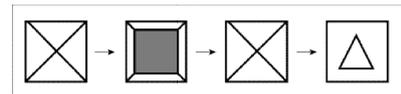
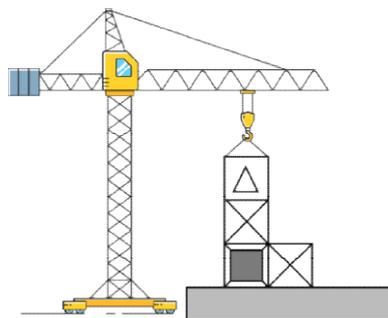
Question / Challenge

Which stickers will Ajay, Divya, Ram and Seema finally get?

- | | | | | |
|-----------|---------------|-----------------------|--------------------|--------------------|
| | Ajay- Car | Ajay- Burger | Ajay- Burger | Ajay- Burger |
| | Divya- Flower | Divya- Car | Divya- Flower | Divya- Car |
| A) | Ram- Burger | B) Ram- Flower | C) Ram- Car | D) Ram- Dog |
| | Seema- Dog | Seema- Dog | Seema- Dog | Seema- Flower |

T18. BUILDING ORDER

In Beaverland, block houses are built out of different blocks. A crane takes blocks one by one in a given order. It puts each block anywhere on the base or on top of another block. The house shown below is built using this sequence of blocks:



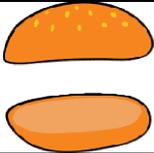
Question / Challenge

Which house **cannot** be built out of this block sequence?

-
- | | | | | | | | |
|-----------|--|-----------|--|-----------|--|-----------|--|
| A) | | B) | | C) | | D) | |
|-----------|--|-----------|--|-----------|--|-----------|--|

T19. HAMBURGER RECIPE

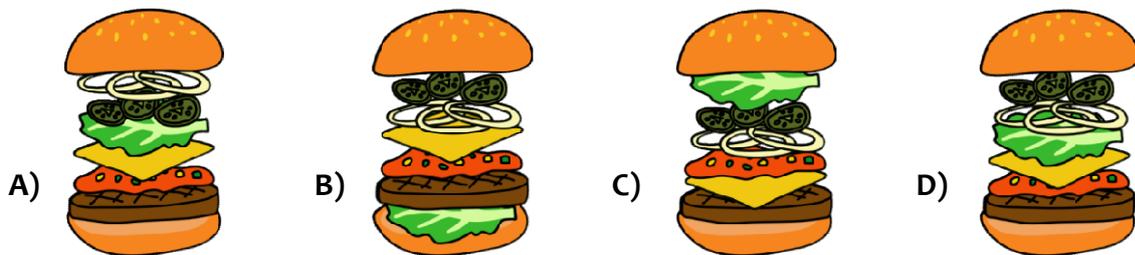
Beaver Jessica is making hamburgers according to the rules below.
Hamburger ingredients:

Buns	Meat	Sauce	Pickles	Lettuce	Onions	Cheese
						

1. The sauce should be right above the meat.
2. Meat and cheese should be below the pickles, lettuce and onions.
3. Onions should not be in contact with the buns.
4. All ingredients must be between the buns.

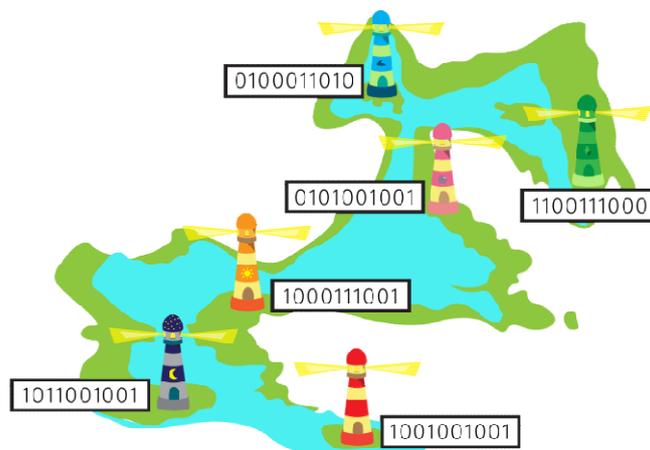
Question / Challenge

Which hamburger is correctly made according to the rules?



T20. THE BAY OF BEAVERS PROGRAMMERS

In the Bay of Beavers Programmers, the lights on each lighthouse are turned on and off in a unique way. Each lighthouse has it's own unique **code** describing the way it turns the light on and off, so that sailors can easily determine which lighthouse they are observing.



For example, if a lighthouse has code "1011001001" it describes that during the first 10 seconds of working, each second the light turns on and off as follows:

on, off, on, on, off, off, on, off, off, on.

Every 10 seconds, the light on the lighthouse turns on and off in the same way.

Question / Challenge

If all lighthouses start working at the same time, in which second will all the lighthouses light up together for the first time?

- A) 5 B) 7 C) 8 D) 9

T21. JOURNEY TO THE HIVE

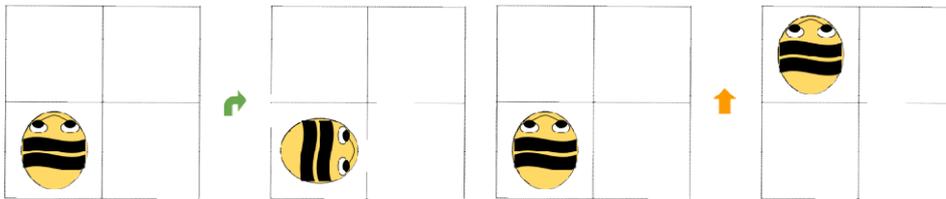
The robotic bee knows these commands:
forward (↑ moves in its direction one square),

backward (↓ moves back one square),

right (↻ turns right),

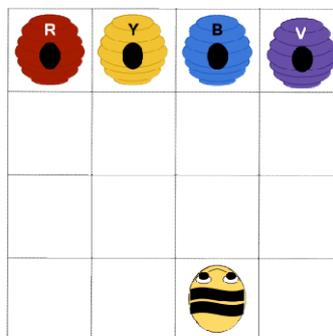
left (↻ turns left).

Examples:



Question / Challenge

Which commands will take the robotic bee to the square with the **yellow** hive?



- A) ↑↻↓↓↻↑↑ B) ↻↑↻↓↓↓↻ C) ↻↑↻↑↑↑↻ D) ↑↻↓↑↻↑↑

