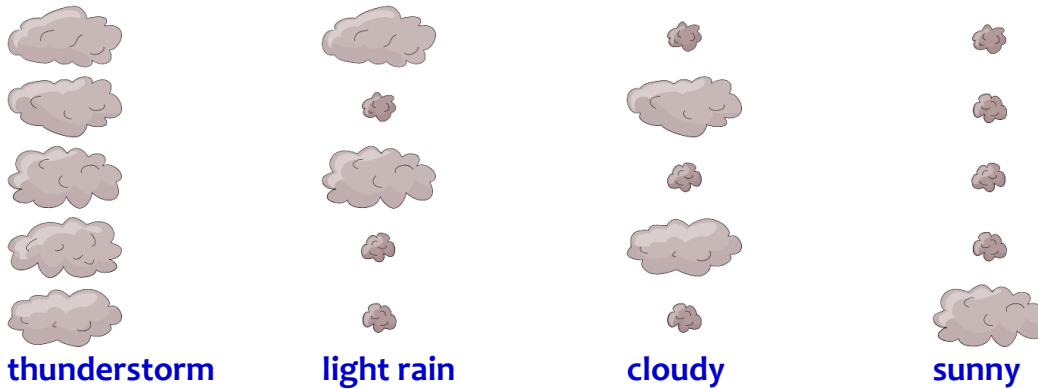


Tasks T1 – T7 carry 3 points each

T1. Cloud Communication

A weather beaver sends messages from the top of a mountain to beavers in the valley below. She makes small and large smoke clouds and uses the code below.



One windy day, the beavers in the valley were only able to see two large clouds as below:



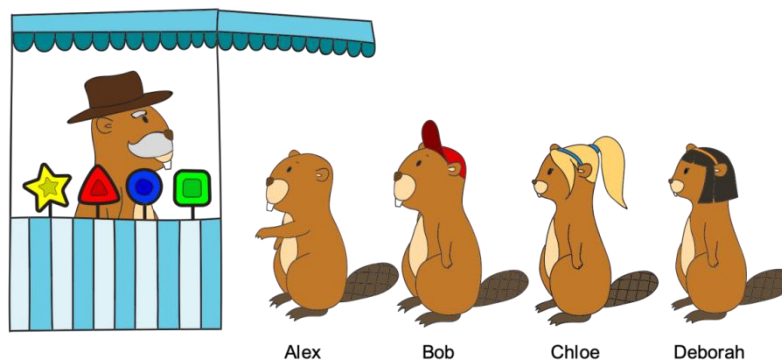
Question / Challenge

What messages might have been sent?


- A) sunny and light rain
- B) thunderstorm and light rain
- C) cloudy and light rain
- D) thunderstorm and cloudy

T2. Candy Shop

Beavers Alex, Bob, Chloe and Deborah stand in line at the candy shop. Each one of them will be given a single candy. The shopkeeper has only one candy of each type and he always gives the candy which is closest to the current beaver. For example, he will give the first square green candy to Alex.



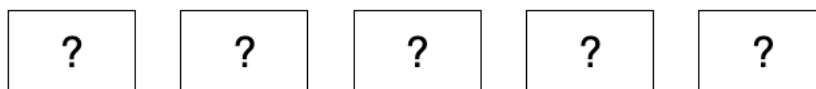
Question / Challenge

Who is going to get the triangular red candy ?

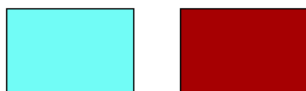
- A) Alex B) Bob C) Chloe D) Deborah

T3. Let's Decorate

Diana would like to decorate the tables for the anniversary of her parents. There are 5 tables in one row. She can use light-blue and dark-red tablecloths, and 3 different flower variations.



Tablecloths:



Flowers:







Help her to fulfill all her wishes, which are:

- every kind of flower is used, or only one kind of flower is used,
- tablecloths of the same color shouldn't be on two tables next to each other.

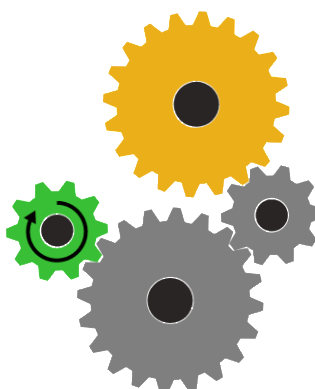
Question / Challenge

Which one of the following plans should Diana choose?

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

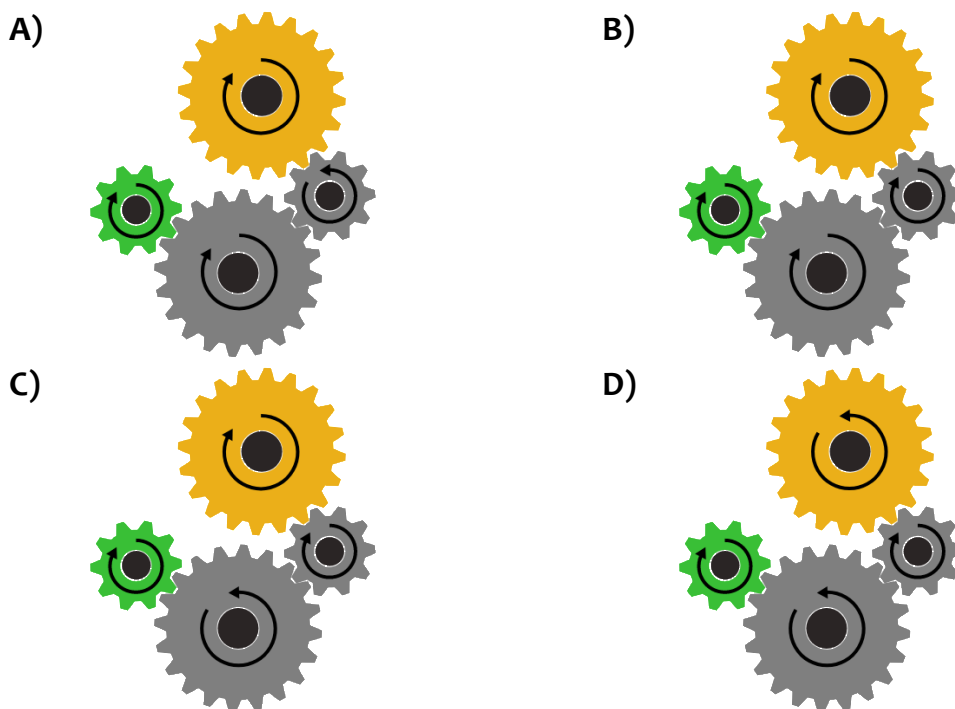
T4. Gears

Look at the gears below.



Question / Challenge

When the green gear turns in the direction shown by the arrow, which direction do the gears turn?



T5. Cleaning

After a concert, the cleaning robot picks up the trash that some of the audience has left on the lawn:



The cleaning robot moves to the closest piece of trash and picks it up. It then moves to the next closest piece of trash and picks it up. The robot continuously does this till all the pieces of trash are picked up.

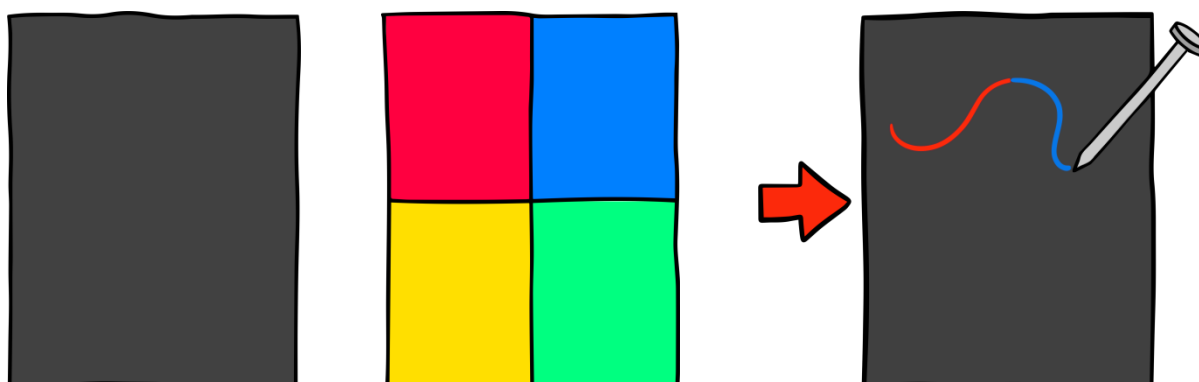
Question / Challenge

Which piece of trash will the robot pick up *last*?



T6. Scratch Art Paper

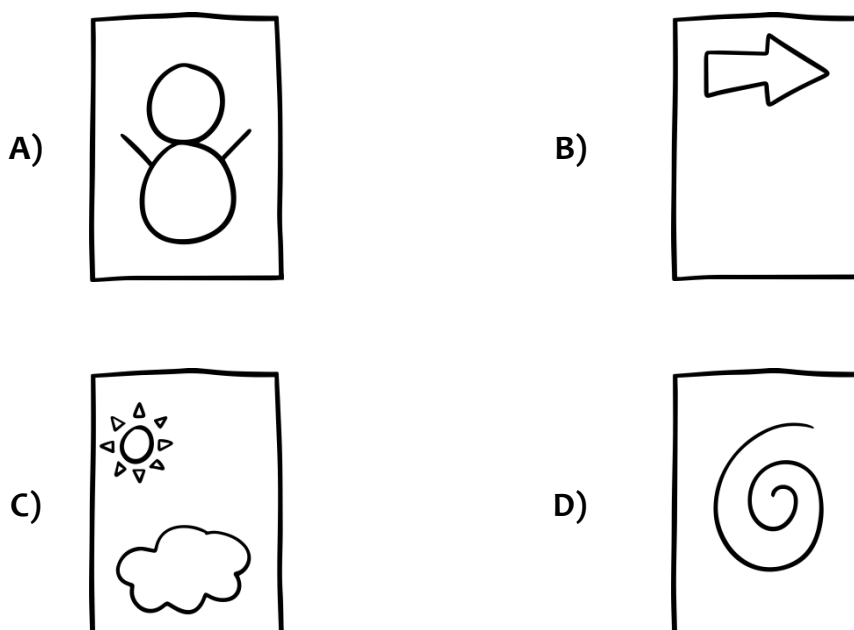
You can draw a pretty picture by scratching with a sharp object on scratch art paper:



Initially we see the black scratch art paper. These four colors are hidden behind the paper. When you scratch it with a pointed object, the color behind it appears.

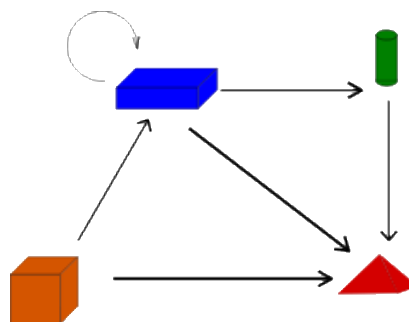
Question / Challenge

When drawing the next picture with a pointed object, which picture will show exactly three colors?



T7. Which tower?

Ela challenged her friend Vernon to build a tower from wooden blocks, following certain rules. The picture shows these rules.

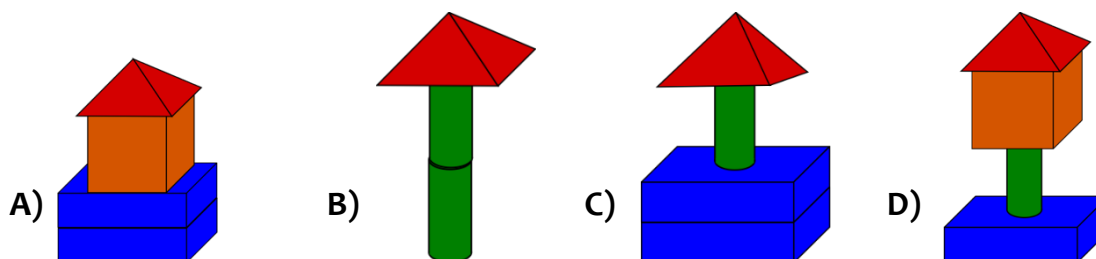


A block can be put on another block only if the rules contain an arrow starting from the first block and ending on the second block. For example, a pyramid block can be put above a rectangular block as there is an arrow starting from the rectangular block and ending on the pyramid block at the right. Note that an arrow leading from a block to the same block allows putting any number of such blocks on top of each other.

You can start the tower with any block and you can stop building at any moment.

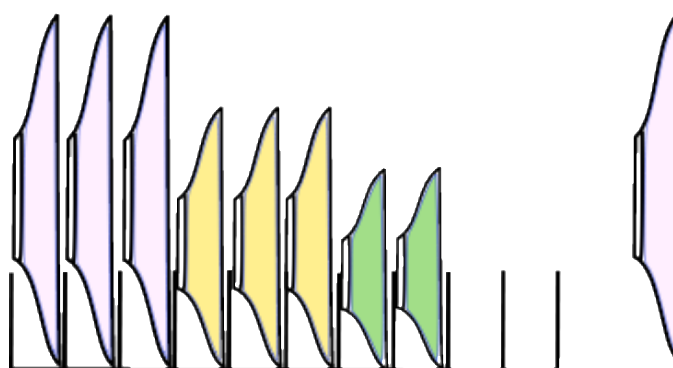
Question / Challenge

Which tower is built correctly according to the rules?



Tasks T8 – T14 carry 4 points each

T8. Plates



Accurate Beaver always has her plates arranged in the order as seen in the picture above: large ones first, then medium ones and finally the small ones. Now she needs to put an additional large plate into her drier.

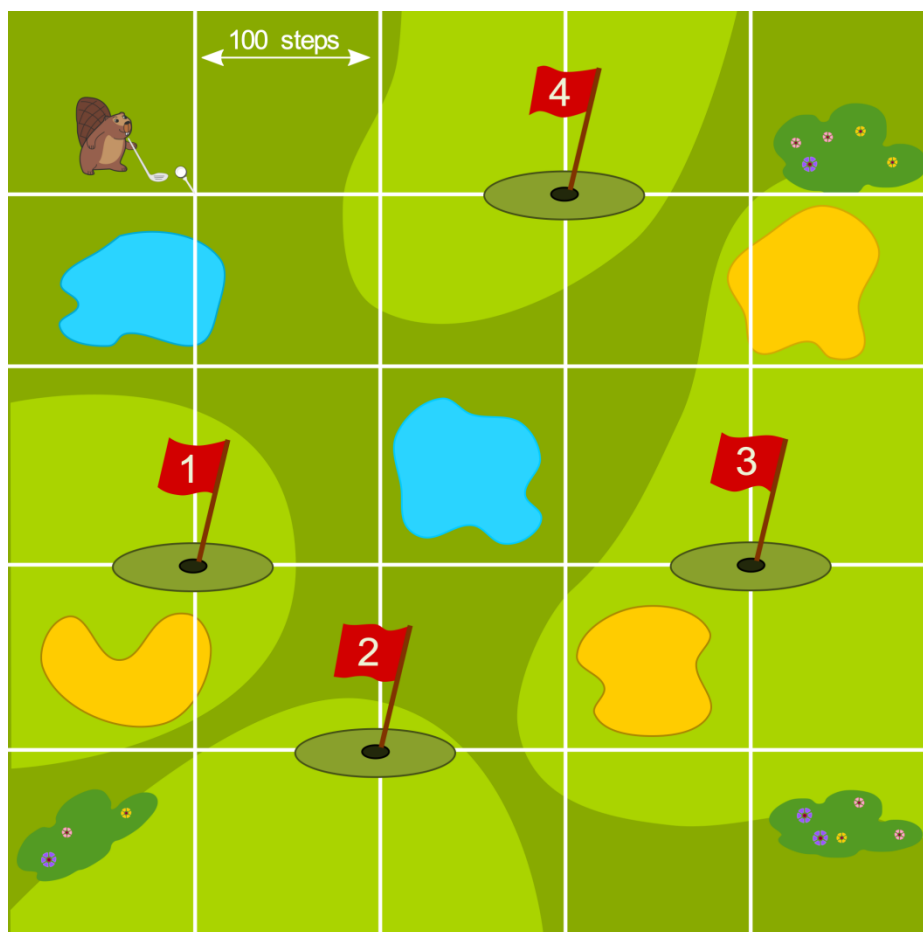
Question / Challenge

What is the minimum number of plates (including the new one) she should move, if she wants her plates to be arranged correctly?

- A) 3 B) 4 C) 5 D) 6

T9. Golfer Bebras

Golfer Bebras wants to walk from his tee to all four holes in the order of the number in the holes: 1, 2, 3, 4. However, he wants to take shortest route and avoid bushes, water and sand traps.



Question / Challenge

As we know, Golfer Bebras can only walk **along the lines** in the playfield. How many steps will he have to take?

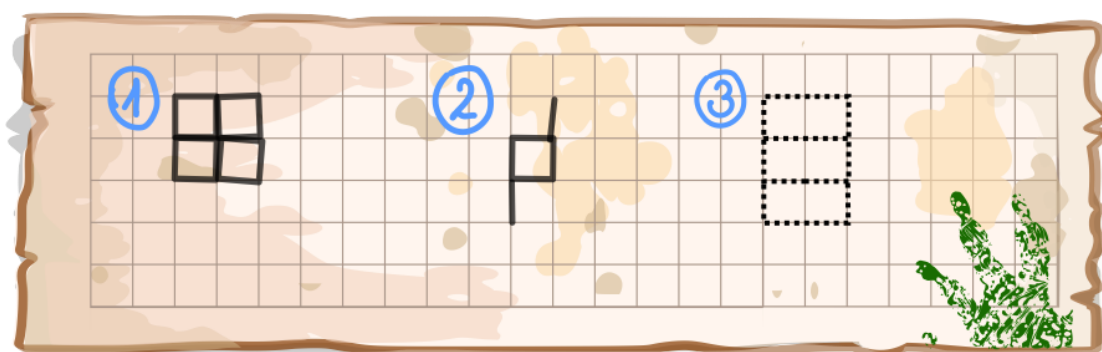
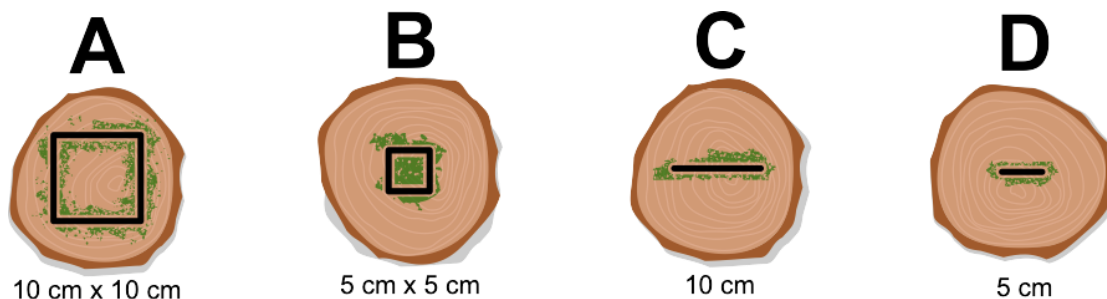
- A) 1200 B) 1000 C) 800 D) 600

T10. Stamps

Beaver Paul has 4 stamps: A, B, C and D in the picture below. By using these, he has already made two figures, 1 and 2, below.

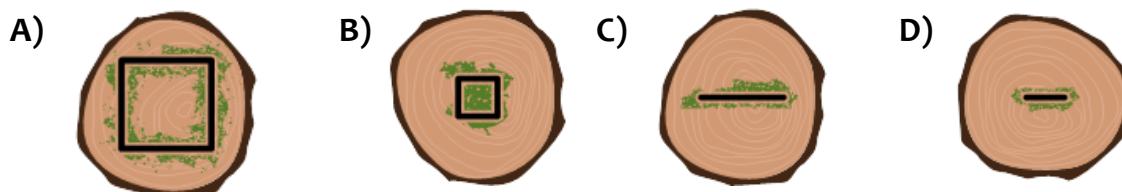
- To create figure 1 Paul used only stamp B (four times).
- To create figure 2 Paul used stamp B (once) and stamp D (twice).

Now Paul wants to make figure 3 below, and his friend Mary offers to help him.



Question / Challenge



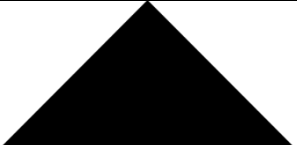
Mary claims that she can make figure 3 by using only one stamp twice!
What stamp would she use?



T11. Rangoli Design

Rangoli is an art form in which patterns are created on the floor using colorful materials.

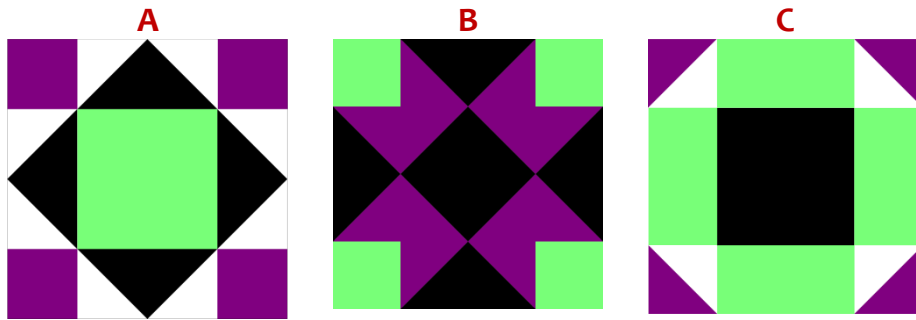
Indu has the following three types of tiles: 8 purple triangles, 4 green squares, and 6 black triangles. Each type has only one size.

Shape			
Quantity	8	4	6

She wants to make Rangoli designs on a floor using only these tiles. She does not have to use all of her tiles, or fully cover the floor.

Question / Challenge

Which of the following Rangoli designs can Indu make?

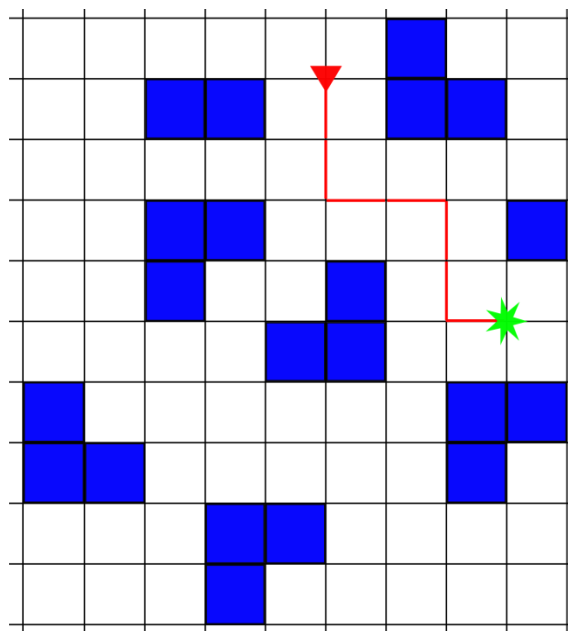


- A) Design A
- C) Design C

- B) Design B
- D) All 3 Designs

T12. Treasure Hunt

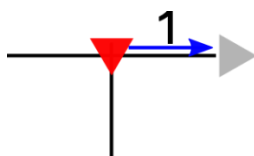
Sara wants to organize a treasure hunt in the city on the map below.



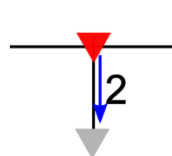
The hunt will start where the red triangle is. Sara hid the treasure on the spot marked with the green star.

She wants to write clues for how to get from start to the treasure, so she codes the instructions with numbers:

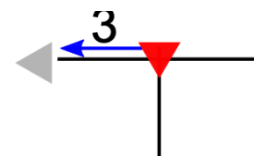
1 - turn left and move a block.



2 - move a block straight ahead.



3 - turn right and move a block.



Question / Challenge

Which of the following clues should Sara write if she wants the kids to follow the path shown on the map?

A) 1-1-2-1-3-1-2

B) 2-2-1-2-3-2-1

C) 2-2-1-1-2-2-1

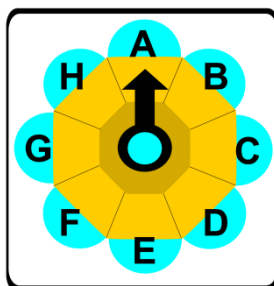
D) 2-2-1-3-1-2-1

T13. Safe

The Beaver Chef has a safe for keeping secret recipes. Chef's safe is unlocked using a circular knob. The knob has a pointer. At any given time, the pointer can point to one of eight letters.

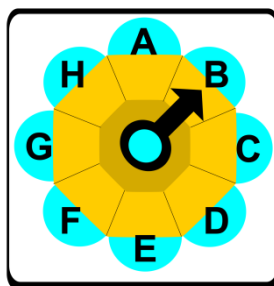
To unlock a safe, Chef must spell the password using the pointer, making the pointer point to the letters of the password one after the other. The knob must be turned clockwise and anticlockwise alternately to achieve this.

The starting position:



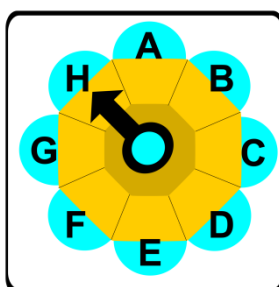
Turn it 1 letter clockwise to point to B:

1↻



Turn it 2 letters anticlockwise to point to H:

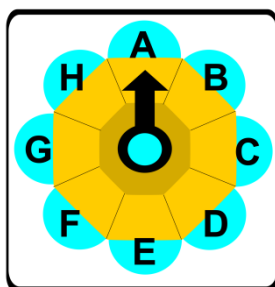
2↻



1↻ 2↻ : The numbers indicate the number of letters. The arrows show the direction. This example enters the password BH.

Question / Challenge

Now the Chef has the password CHEFDG. The lock starts as shown below.



Which of the following will unlock the safe?

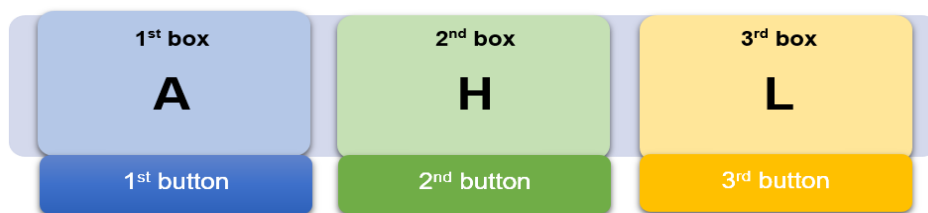
A) 2⌚ 5⌚ 5⌚ 1⌚ 6⌚ 3⌚

B) 6⌚ 3⌚ 3⌚ 7⌚ 2⌚ 5⌚

c) 2⌚ 3⌚ 5⌚ 7⌚ 6⌚ 5⌚

D) 2⌚ 1⌚ 4⌚ 3⌚ 3⌚ 2⌚

T14. Magic Buttons



When a user clicks on 1st, 2nd, and 3rd buttons, specific letters appear in the boxes.

- In 1st box, there exist A, B, C, D, and E letters.
- In 2nd box, there exist F, G, H, I, J, and N letters.
- In 3rd box, there exist S, K, L, M, O, P, and R letters.
- When a user clicks on a button continuously, the letter in the corresponding box changes. For instance, when a user clicks on 1st button for three times continuously, C letter appears in the 1st box. When a user clicks on 1st button for seven times, B letter appears in the 1st box.

Question / Challenge

Based on this information, can you find the letters that will appear in the boxes when a user clicks on each button for eight times?

A) CHK

B) DHO

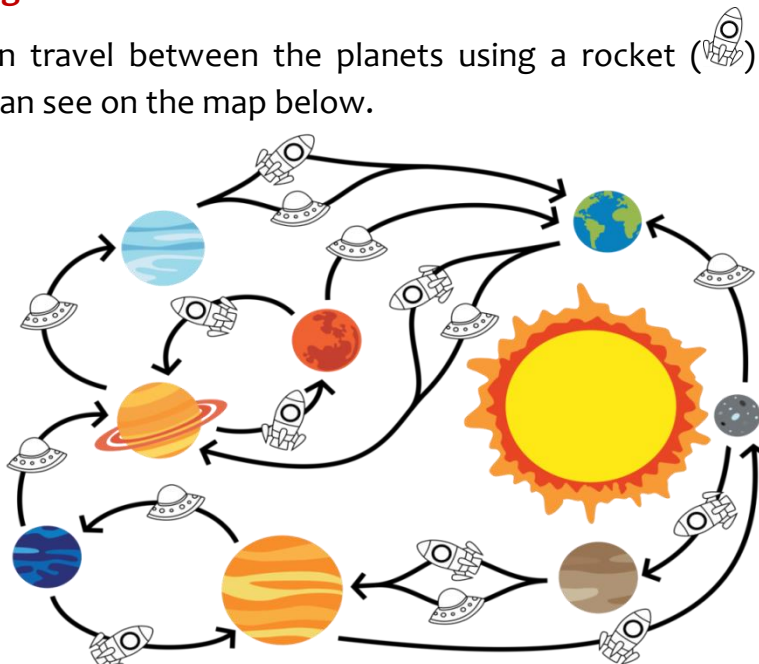
C) EHS

D) CGS

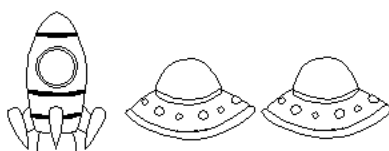
Tasks T15 – T21 carry 5 points each

T15. Space traveling

Astronauts can travel between the planets using a rocket (🚀) or a spaceship (🛸), as you can see on the map below.



For example, an astronaut is on Venus (🌋) and wants to go to Saturn (♄). He can first choose a rocket to fly to Jupiter (♃). Then he will have to travel in a spaceship to Neptune (♆), and finally in a spaceship to his destination. The astronaut shortens this description writing just:



The astronaut Tine is stuck on the planet Neptune (♆), and wants to come back home to the planet Earth (🌍). The space agency sent him the following travel suggestions.

Question / Challenge

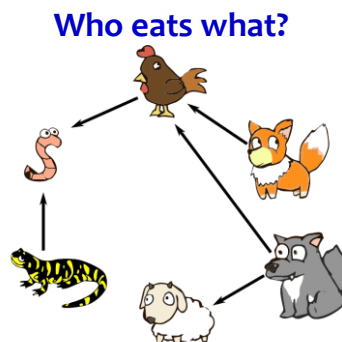
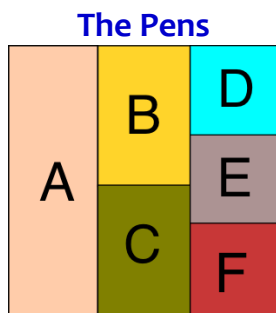
Which of them will **not** bring Tine back to the Earth?

- A) 🛸 🛸 🚀
- B) 🚀 🛸 🚀 🛸
- C) 🚀 🛸 🛸 🛸 🚀
- D) 🚀 🚀 🛸

T16. Koko's animals

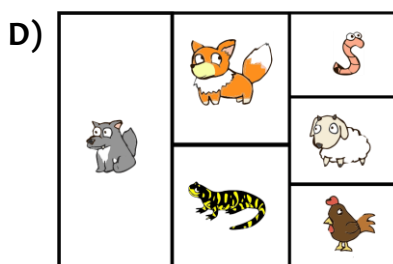
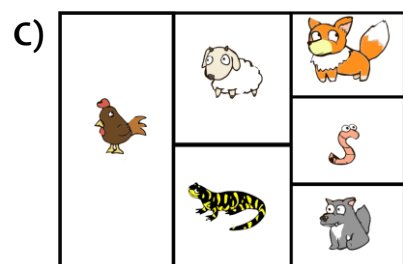
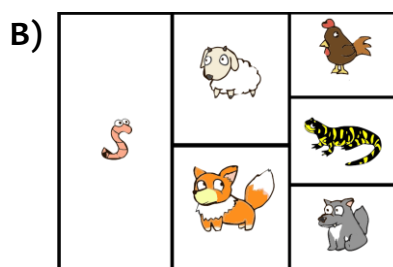
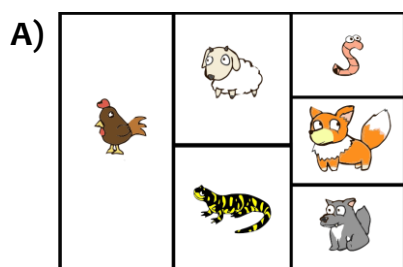
Koko loves animals and has many at home. He puts each animal in its own pen. There are 6 pens, shown as A, B, C, D, E, and F in the picture below.

He needs to keep them safe. An animal can't live beside another animal that would eat it. He drew another picture to remember who eats what.



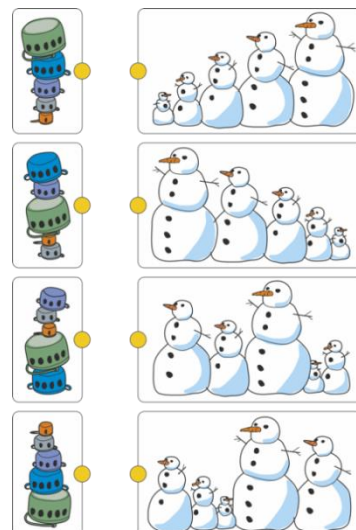
Question / Challenge

Which solution is not a good choice?



T17. Snowmen's hats

Five snowmen are standing in line. From left to right each gets its hat according to its size. The snowmen get the hats from the top, one by one.



Question / Challenge

Which pile of hats belongs to which row of snowmen?

A)

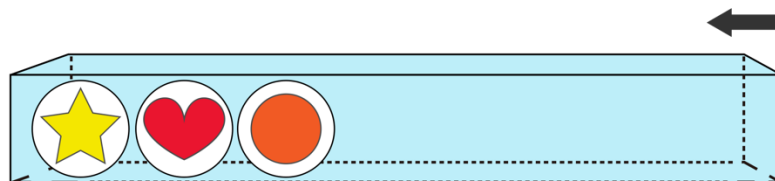
B)







C)

D)

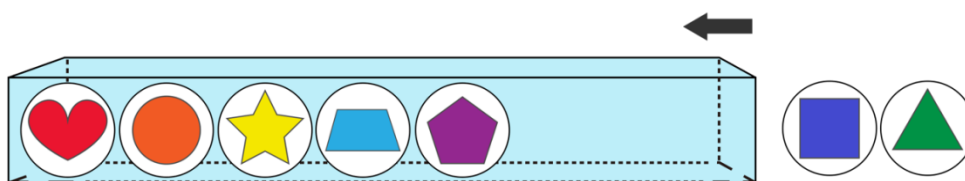
T18. Box of Balls

Baby Beaver has a transparent box with an opening on the right hand side.



He can only push one ball at a time. For example, if Baby Beaver wants to insert  in between  and , he needs to take out , push  and then push  back!

Question / Challenge



As shown in the figure above, Baby Beaver has now five balls in the box and two balls out of the box.

He wants to push all the balls in the box in the following order:

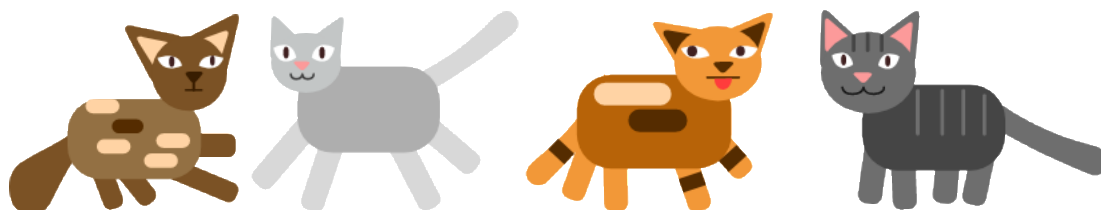


Help him by selecting the correct sequence of actions.

- A) Take out → take out → push → push → push → push
- B) Take out → take out → push → push → push → push
- C) Take out → push → push → push
- D) Take out → take out → push → push → push → push

T19. Swapping Cats

Four cats stand in a line as shown below.

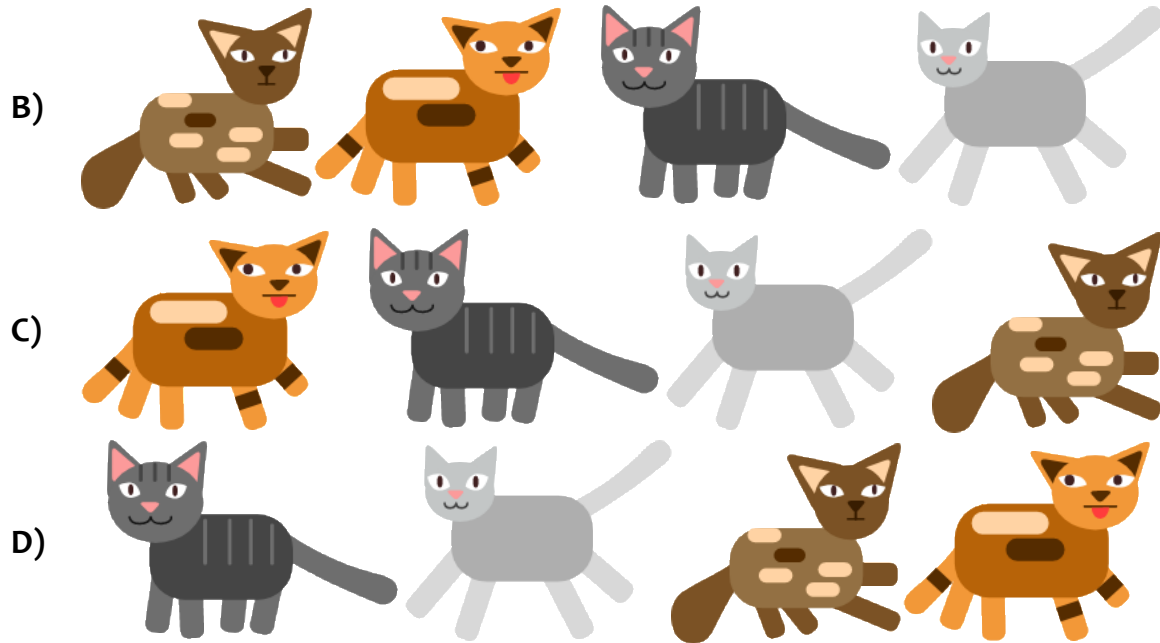


A swap occurs when any two cats exchange positions.

Question / Challenge




If exactly two swaps occur (one after the other), which of the following cannot be the result?

- A)



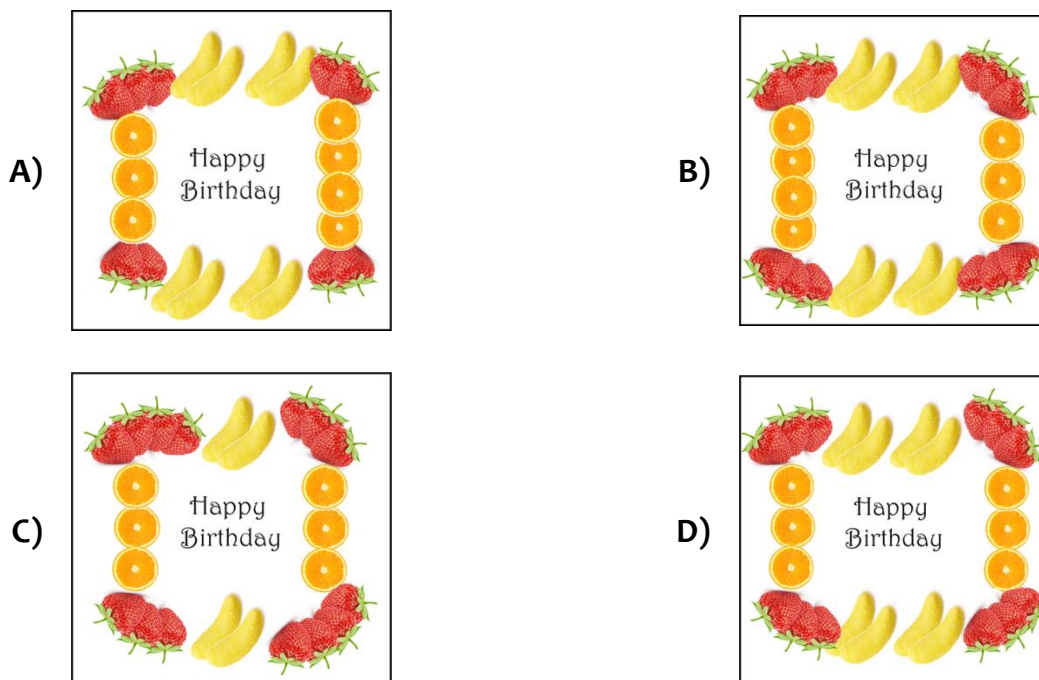
T20. Birthday Cake

For Neha's birthday, her mother went to a cake shop to buy a cake. Neha wanted the cake to have:

- Three strawberries  each at the four corners
- Not more than three slices of oranges  on each of the left and right sides
- Two pairs of banana candies  on each of the top and bottom sides

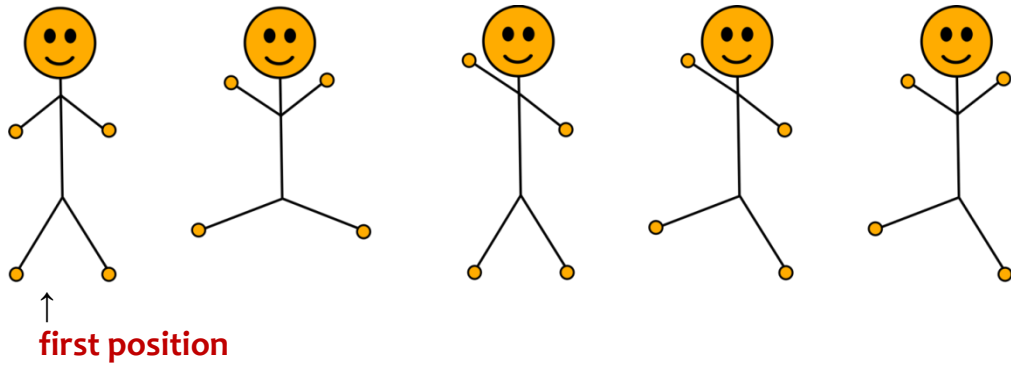
Question / Challenge

Which one of the following cakes should Neha's mother choose?



T21. Beaver's Samba

Beaver's Samba is a famous dance in Beaverland. The dance has 5 positions. During each move, you change either the position of one leg or of one arm. Anna remembers that the dance has only 5 positions but does not remember the correct order.



Question / Challenge

What is the third position?

