

## TASKS TI - T7 CARRY 3 POITTS ERCH

T1. VISITING THE JUNGLE
Martha and her father visited the jungle on the summer vacation. The father wanted to show her the beautiful waterfalls that are in the place. During the tour, they met different animals in the following order. Finally they reached the falls.



Monkey


Coati


Monkey


Ant


## Question / Challenge

Going clockwise, as shown by the arrow in the center of the images, what is the option that represents the order in which Marta saw the animals during the journey to the falls?
A)

C)


D)


T2. KIDS AND BOOKS
Kids borrow books from the library. The library made a borrowing table to find out which book has been the most popular.

## Question / Challenge

Which book are the kids borrowing most often based on the borrowing table below?


## T3. MAKING A NECKLACE

Beaver Lala likes to make necklaces with beads. When making the necklace, Lala uses one piece of string which cannot be cut. Necklace is created by adding or removing beads from the left or the right side.


## Question / Challenge

Lala wants to insert a star bead where the arrow points. She needs to remove the fewest number of beads. How many beads should Lala remove?
A) 3 beads
B) 4 beads
C) 5 beads
D) 6 beads

## T4. NEW CAR

Charithra wants a red, electric car. It needs to be able to drive at least 150 km without needing to be recharged.

|  |  |
| :--- | :--- |
| Colour: Red |  |
| Range: 120 km |  |
| Fuel: Electric |  |
|  |  |
| Colour: Black |  |
| Range: 250 km |  |
| Fuel: Electric |  |
| Colour: Red |  |
| Range: 200 km |  |
| Fuel: Electric |  |

## Question / Challenge

Which car should Charithra get?
A) Shopper
B) Comet
C) AG12
D) IT Car

## T5. MOON PHASES

Sarah has 4 pictures of moon phases in wrong order. She wants to rearrange her pictures in correct order from left to right to display them in her class.



II


III


IV

## Question / Challenge

What is the correct order?
A) III, II, I, IV
B) IV, I, III, II
C) III, I, IV, II
D) III, IV, I, II

## IBIC - InTERחATIOMAL CHALLENGE Oח InFORMATICS AחD COMPUTATIONAL THINKIIG 2022 PREECOLIER LEVEL [CLRSS I \& 2]

TIME RLLOWED: I2O mInutes
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. SORTING THE IMAGES

Tom has three pictures of a cup as shown. We don't know the order in which he took these pictures.


## Question / Challenge

What is the correct order, if we know the cup was empty at the end?
A)

C)

B)

D)

 Preecoller level [CLASS I \& 2]

TIME RLLOWED: 120 mInutes

## TRSKS T8 - TI4 CARRY 4 POITIS EACH

## T8. SKI VILLAGE

Petra, Vid and Ante are little beavers who got lost in the ski village of 4 huts. Every one of them remembers what some parts of their hut look like, sufficient to find it. They are shown in the table below.

| Beaver | Number of windows $\boldsymbol{\#}$ | Hut color | Door color |
| :---: | :---: | :---: | :---: |
| Petra | 4 | green |  |
| Vid | 4 | not yellow | black |
| Ante | 2 | yellow | red |



## Question / Challenge

In which of the houses does Petra live?
A)

B)

C)

D)


T9. MIDDLE CHILD
A family has five children with different heights. The two tallest and the two shortest leave.

A

B

C

D

E

## Question / Challenge

Which child is remaining?
A) B
B) C
C) $D$
D) E

T10. TRAIL TO GRANDMA
As shown, a beaver is going to visit her grandma. There are several different trails to grandma's house.


## Question / Challenge

Which one of the trails below can lead the beaver to grandma's house?
A) $(5=c=c=c=c=0$
B)

C)


## T11. CIRCLES

The Little Beaver has two circles divided into 5 sectors. The sectors are colored and numbered as shown below:


When the Little Beaver presses a button, only the left circle can rotate one sector clockwise. The Little Beaver wantsboth circles to look the same. To achieve that, she is going to rotate the left circle the help of the control button.

## Question / Challenge

What is the minimum possible number of button pressings required to match the other one?
A) 2
B) 3
C) 4
D) 5

T12. ROBOT COLORS
Taweeq has four robot friends. Each robot is painted using four colors: red, blue, green and yellow. Each robot has a unique color pattern. This means that there are never two robots with the same part painted in the same color.


## Question / Challenge

Based on the first three robots, what will the fourth robot look like?
A)

B)

C)

D)


T13. 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:

| $\uparrow$ | $\rightarrow$ | $\downarrow$ | $\downarrow$ | $\uparrow$ | $\leftarrow$ | $\leftarrow$ | $\downarrow$ | $\rightarrow$ | $\rightarrow$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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?
A)
$\bigcirc$
B) $\bigcirc$
c) 8
D)

## T14. 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?
A)

B)

C)

D)


## TASKS TI5 - T2I CARRY 5 POIחTS ERCH

## T15. LOG JAM

The beavers want to get the golden log out of the pond by sliding it out throughthe exit on the right. All the logs can only slide backwards or forwards though!


## Question / Challenge

How many logs do they need to move?
A) 3
B) 4
C) 6
D) 7

T16. JOURNEY TO THE HIVE
The robotic bee knows these commands:
forward ( ${ }^{1}$ moves in its direction one square),
right ( $\pitchfork$ turns right),
left ( $\boldsymbol{h}$ turns left).

## Examples:



## Question / Challenge

Which commands will make the robotic bee go to the square with the yellow hive

A)
B) $\rightarrow$ 而
c)
D) $\rightarrow 4$

## T17. FIVE CANDIES

Brian's favorite candies come in five flavors.
Brian puts one of each flavor into a tube to take to school every day. During the day, Brian eats the candies in the order they come out of the top of the tube.

Today he wants to eat them in the order: grape
 orange $\triangle$, lemon ,strawberry (and blueberry).

## Question / Challenge

What tube is correct for Brianso that he gets the candies in the preferred order?
A)

B)

C)

D)


T18. 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?
A)

B)

C)

D)


## T19. 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

B

C

D

E

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

## T20. COLOURFUL CANDLES

It is Simon's birthday. In Simon's home they have birthday candles in three colours. All o candles are orange, all 1 candles are red, and so on (See the table). Which means, all 0, 3, 6, 9 candles are orange, all 1,4,7 candles are red, and all 2,5,8 candles are blue.


Today Simon turns 7. He will have a red candle on his birthday cake.

## Question / Challenge

After how many years will Simon have only red candles on his birthday cake again?
A) 3
B) 4
C) 6
D) 12

## T21. PARKING GARAGE

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 lane can this car select to enter the parking garage?

A) 1
B) 2
C) 3
D) 4


