Chapter 5 Class 6 Ganita Prakash - Case Based Question Worksheet 1 by *teachoo*

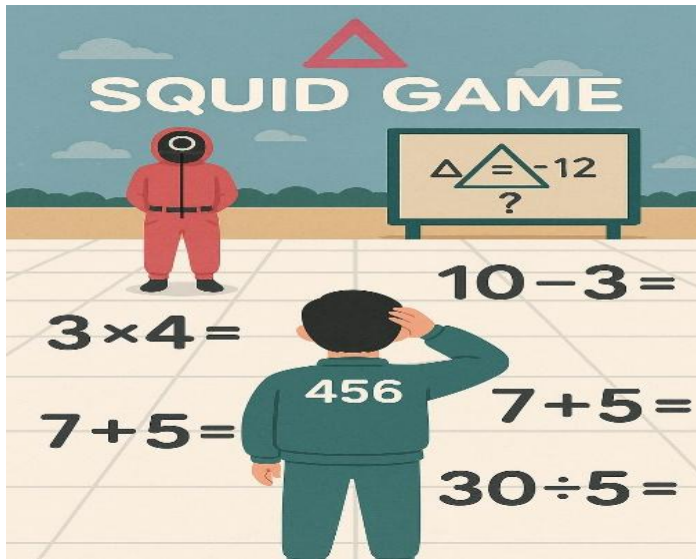**Chapter:** **Chapter 5 Class 6 - Prime Time (Ganita Prakash)**

Name: _____

School: _____

Roll Number: _____

Case 1: Prime Time in Squid Game

The students of class 6 have been invited to a special version of Squid Game: Math Edition.

Don't worry - this game is completely safe and designed to test only your number knowledge, not your strength!

In the game, Participant, must go through different levels where only players who known about prime numbers, composite numbers, factors and multiples can move forward.

1. Identify Prime Numbers - You walk into a tunnel with 10 glowing stones, each with a number. The task is that you have to step only on the prime numbers. Which of the following stones will you step on? Numbers on stones are 11 , 15 , 23 , 28 , 31 , 33 , 37 , 40 , 43 , 50

2. The Composite Trap -You reach a bridge made of 12 tiles. Each tile has a number. The task is that you have to step only on tiles with composite numbers to cross safely. Which of the following tiles will you step on? Numbers on tiles are 4 , 7 , 9 , 13 , 15 , 21 , 23 , 25 , 29 , 33 , 35 .

3. The Factor Challenge -You enter a room with 8 locked doors, each marked with a number. The task is choose doors whose numbers are factors of 48 to unlock them.

   Which of the following door numbers will you choose? Door numbers are 2, 5, 6, 11, 16, 20, 18, 48

4. Multiple Maze -You are in a maze with multiple paths. Each paths shows a number. The task is to follow paths with number that are multiples of 7 to find the exit and win the Game.

   Which of the following path numbers will you choose? 14 , 18 , 24 , 28 , 33 , 35 , 41

Case 2: Sanya's Selection Challenge

Sanya is an intern at teachoo. She has just one week to prone her skills. Her task is to make maths assignments for class 6 students and today, she must create an activity for the chapter Prime Time, focusing on co-prime numbers and prime factorisation.

She decides to test herself! Help her by solving the following questions :-

1. Co-Prime in Sanya's Day - Sanya worked for 5 hours on wednesday and 8 hours on Friday creating content . Are 5 and 8 co-prime numbers? show how you know.

2. Prime Factorisation of her goals - Sanya's goal is to earn a stipend between ₹ 15,000 and 20,000 for her 2-month internship. She looked at both amounts and decides to factorise them for fun! Find the prime factorization of 15,000 and 20,000 separately.

3. Sanya's Selection Strategy - Prime Detective Game -To improve her chances of selection, Sanya decided to revise some math tricks every day. She noted the following numbers she saw during the week- 2, 3, 9, 11, 13, 15, 16, 17, 19

Which pairs among them are co -prime?

Find the prime factorisation of and 9, 15, 16 and 19.

4. Sanya's Surprise Challenge – Common Factors Test - Sanya played a quick challenge game online where she had to find common factors of two numbers within 10 seconds! She got the numbers 14 and 42. Help her complete the challenge: List the common factors of 14 and 42

Case 3: The Birthday Game at Avni's Party

Avni was celebrating his 11th birthday with his friends at home. She prepared a fun game involving lucky numbers and surprise gifts. She made a box with 20 chits, each chit having a 3 -digit.

The rules of the game are -

- If the number on chit is divisible by 2, the player gets a chocolate.

- If the number on chit is divisible by 5, they get a pen.

- If the number on chit us divisible by 10, they get both a chocolate and a pen.

- If the number on chit is divisible by 4, they win a sticker pack.

Below is a list of numbers picked by some of the friends -

Friend	Number on Chit
Riya	840
Aryan	125
Meenu	456
Kabir	720
Shreyas	109
Tanu	460
Tara	375

1. What all received a chocolate?
2. Who all received a pen?
3. Who won both chocolate and pen?
4. Who won a sticker pack?

Important links

- Answer of this worksheet - https://www.teachoo.com/25634/5383/Case-Based-Questions---Worksheet-1/category/Teachoo-Questions---Case-Based/

- Full Chapter with Explanation, Activity, Worksheets and more –
  https://www.teachoo.com/subjects/cbse-maths/class-6/chapter-5-ganit-prakash/

- Science Class 6 – https://www.teachoo.com/subjects/science/class-6/

- Maths Class 6 - https://www.teachoo.com/subjects/cbse-maths/class-6/

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