# **Bal Bharati Public School, Pitampura**

# **Let's Explore and Learn**

# Activities to engage your child during the holidays.

- 1. The following activities are to be done in a notebook. (one notebook for all subjects)
- 2. Reading Activity Read the supplementary readers prescribed in your English Syllabus and design 'comic strip' for any one.

### **TED TALKS**

<u>TASK</u> – Students must watch the TED Talks carefully and write three takeaways that they learnt from the same. (Word Limit – 80-100 words)

### Class VI -

- 1. The Mindset of a Champion Carson Byblow <a href="https://www.youtube.com/watch?v=px9CzSZsa0Y">https://www.youtube.com/watch?v=px9CzSZsa0Y</a>
- 2. We Are All Different and THAT'S AWESOME! Cole Blakeway <a href="https://www.youtube.com/watch?v=sQuM5e0QGLg">https://www.youtube.com/watch?v=sQuM5e0QGLg</a>

### Class VII -

- 1. You Don't Find Happiness, You Create It Katarina Blom https://www.youtube.com/watch?v=9DtcSCFwDdw
- 2. The Power of Reading April Qu https://www.youtube.com/watch?v=9fLlkOMrMq4

### Class VIII -

- 1. The Psychology of Self Motivation Scott Geller https://www.youtube.com/watch?v=7sxpKhIbr0E
- 2. Being Happy and Living at the Moment Aisha Chaudhari https://www.youtube.com/watch?v=ENTf10L1jt0

### Class IX -

- 1. Why I Live a Zero Waste Life? Lauren Singer https://www.youtube.com/watch?v=pF72px2R3Hg
- 2. JK Rowling on The Benefits of Failure <a href="https://www.youtube.com/watch?v=kM8HJPbFnJg">https://www.youtube.com/watch?v=kM8HJPbFnJg</a>

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### **Developing an Attitude of Gratitude**

Gratitude is the quality of being thankful, readiness to show appreciation for and to return kindness. We have innumerable blessings in our lives which we often take for granted. Through this exercise, let us learn to count our blessings and develop an attitude of gratitude, one day at a time.

These activities are to be done [one activity per day]

### DAY 1 - Gratitude Jar

For this exercise you can use any available jar at home and use available materials at home to decorate it. Think of at least three things throughout your day that you're grateful for. It can be something as benign as a coffee at your favourite place or as grand as the love of your dear friend. Do this every day. Write down what you are grateful for on little slips of paper and fill the jar. Over time, you will have a jar full of myriad of reasons to be thankful for.

### DAY 2 - Gratitude Tree

- Leaf cutouts to write on
- Punch a hole at the top of each leaf
- Put a string/ribbon through each
- Put stones in a vase, stick the tree branch or twig in the middle
- Draw/write things that you are grateful for
- Hang the leaves from the branches and behold your gratitude tree.

### DAY 3 - Fill in the Blanks

Identify three things in each category that you're thankful for -

S. No	I'm grateful for these three	List your choices here -
	things	
1.	I hear	
2.	I see	
3.	I smell	
4.	I touch/feel	
5.	I taste	
6.	Three Blue Things	
7.	Three Animals/Birds	b.
8.	Three Friends	
9.	Three Teachers	
10.	Three Family Members	
11.	Things at my Home	
12.	Three Holidays	

13.	Three Books I love	
14.	Things I love to wear	
15.	Technological Gadgets	
16.	Three Simple Pleasures	
17.	Things from Last Week	
18.	Life Lessons I've Learned	
19.	Things I'm Good at	
20.	Things I Take for Granted	

### DAY 4 - A Letter to God

Write a letter to God thanking him for all the blessings in your life. Describe what you're doing in life now and how frequently you remember his acts of kindness and generosity. (Word Limit – 150 Words)

### DAY 5 - Gratitude Journal

Take out a few minutes every day to write down five good things about your day. The entries don't have to be major events – they can be as simple as a good meal, talking to a friend, or getting through a difficult challenge.

## DAY 6 - Thank You Postcards

Design 2 small postcards for your friends/family members/teachers/anyone you want to thank. Mention the reason why. The card doesn't have to be too fancy. Focus more on the content.

## DAY 7 - 'What Would You Feel Without It'

Write the names of five of your favourite things/people on a small post card or a sticky note. Describe how you would feel if that thing/person were to go missing from your life.

### DAY 8 - 'What Went Well?'

Write down three things that went well in your day/week and explain why. The items can be everyday – your co-worker made coffee for you, your husband picked up a treat for you, or something extraordinary like you got a promotion, you topped the class etc. Next to each positive event, answer the question, 'Why did this happen?'

Reflect on the good things and feel the gratitude for them.

### DAY 9 - Draw Gratitude

Gratitude is a powerful practice that has received a lot of attention. There are some real benefits associated with cultivating gratitude. If gratitude was a person, how would it look like? Draw your interpretation of gratitude. You can sketch, paint, colour or convert it to a cartoon.

### DAY 10 - Self Gratitude

Identify three things that you appreciate about yourself. Pick things that are meaningful. These can involve your personality, your qualities, your actions or anything else directly related to yourself.

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# CREATIVE AND ENGAGING ACTIVITIES FOR STUDENTS

- From Chemistry to Biology to Physics and much more, these men and women have helped us learn more about the world around us, the universe, and why things work the way they do! Find the names of any 5 famous scientists and collect information about their discovery. (Word Limit- 50 words)
- Transform a fictional book character into a hand puppet. Students have to read a book in order to know how the book character looks like. They can create a short video of 2 min to tell about the book with their hand puppet.
- Create your own water clock.( refer to website : steampoweredfamily.com)
- Virtual field trip: explore the world without leaving your home with the help of virtual field trips and write a brief report in 100 words. Boston children's museum.
- A first-person diary describing a day in the life of your favorite animal—with information about habitat, predator-prey interactions, and survival strategies.
- A first-person account of a major volcanic eruption, such as Mount St. Helens, including all relevant scientific details, the type of volcano, the nature of the eruption, the damage done.
- A story describing the journey of a bite of food from the mouth on downward, with details showing all the steps along the way (this makes a great comic strip or first-person account).
- With due credit to H.G. Wells, a story about a trip back in time to the Jurassic or any other era, describing the plants, animals, and topography of the time.
- And with a nod to Jules Verne, a scientifically accurate journey to the center of the earth, describing the characteristics of each layer one would encounter.

• Do it yourself activity:

### Does an Orange Float or Sink?

• Does an orange float or sink when placed in water? Seems like a fairly straight forward question, but is it? Give this fun density science experiment for kids a try and answer the question while learning a unique characteristic of oranges

### What you'll need:

- An orange
- A deep bowl or container
- Water

### Instructions:

- 1. Fill the bowl with water.
- 2. Put the orange in the water and watch what happens.
- 3. Peel the rind from the orange and try the experiment again, what happens this time?

### What's happening?

The first time you put the orange in the bowl of water it probably floated on the surface, after you removed the rind however, it probably sunk to the bottom, why?

The rind of an orange is full of tiny air pockets which help give it a lower density than water, making it float to the surface. Removing the rind (and all the air pockets) from the orange increases its density higher than that of water, making it sink.

Density is the mass of an object relative to its volume. Objects with a lot of matter in a certain volume have a high density, while objects with a small amount of matter in the same volume have a low density.

# CLASS-IX ASSIGNMENT -1

Q1. Write a story about the zoo without using the names of any animals in about 150-200 words.		

# **ASSIGNMENT -2**

Think and Answer:
Q1. Pretend that you get to make one rule that everyone in the world must follow. What rule do you make? Why?
Q2. What are three ways the world would be different if people did not need to sleep? What would you do with the extra time?
Q3. Are you more like a river, a lake, an ocean, or a waterfall? Why?
Q4. If you could choose one thing that costs money and make it free for everyone forever, what thing would you choose? Why?

### ASSIGNMENT -3

If you could talk to trees, what do you think they might say? Create a conversation between you and a tree in the form of a comic strip.

## **ASSIGNMENT-4**

## **BRAIN TEASERS**

1.There are ten birds perched on a fence. A farmer aims his rifle and shoots one. How many birds are left?
2.What weighs more – 100 pounds of feathers, or 100 pounds of quarters?
3.If you were alone in a dark cabin, with only one match and a lamp, a fireplace, and a candle to choose from, which would you light first?
4. There are a dozen eggs in a carton. Twelve people each take a single egg, but there is one egg left in the carton. How?

### **ASSIGNMENT-5**

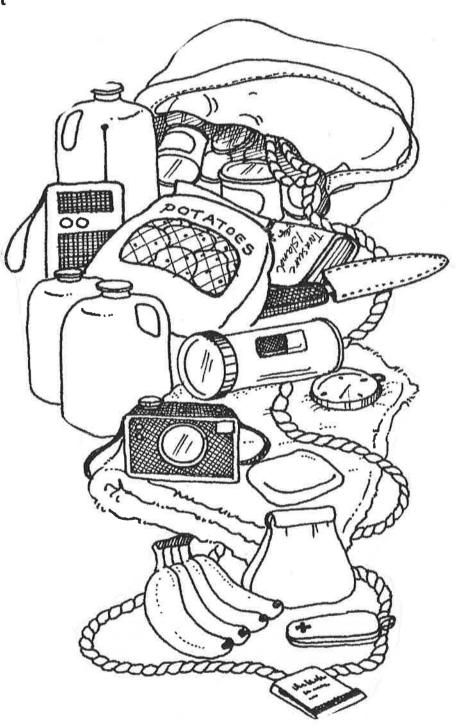
Read the stories 'The lost Child' and 'The Adventures of Toto' and prepare graphic organizers for both the stories.

### **ASSIGNMENT 6**

### **The Survival Game**

Oh no! Your watch stopped and you missed the tour boat back to civilization. Looks like you'll be spending a while on an uninhabited tropical island. Below is a list of 30 items that might come in handy during your stay. Rank them in order of most important (1) to least important (30).

a bag of Dried Fruit



N	ame

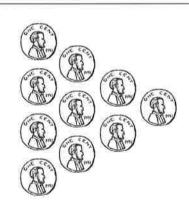
# **Puzzling Problems**

When you analyze a problem, you break it into smaller parts to find the answer. You look for clues in the problem. You add these clues to what you already know. Some problems have only one answer, but other problems have many answers.

Analyze these problems to come up with solutions. Write your answers on the lines provided.

- I. How can you make an unshelled hard-boiled egg balance on its end?
- **2.** How can two people stand on the same sheet of newspaper, face to face, so they can't possibly touch each other? (Hint: Their hands aren't tied and you can't tear the sheet of newspaper.)
- **3.** A boy went to the dentist to get a cavity filled. The boy was the dentist's son, but the dentist was not the boy's father. How can this be?
- **4.** You have ten pennies arranged like this.

  Make the pennies face the other way. You can only move 3 pennies.



**5.** You have two bottles. One holds five quarts. One holds three quarts. You need exactly four quarts. How can you do it?



**Write About It** Write a step-by-step account of how you solved one of the problems on this page.

Name				
Hamile				

# What Am I?

Below is a list of definitions for words that begin with the letter h. See how many you can guess.

	Wor	ds That Start With h
۱.	Balls of ice that fall from the sky	•
2.	A 17-syllable Japanese poem	
3.	Not whole	
4.	A patty of chopped beet	
5.	An allergy to grasses and weeds	
6.	The organ that pumps blood	
7.	A great person; someone people admire	
В.	Opposite of <i>low</i>	
9.	The study of past events	
10.	A country known for its tulips	



**Define I†** Write a definition for each of these *h* words: *hello, handkerchief, horse.* 

# Thinking Skills Worksheet for Class 9 (Part 1) WOFKsheet - 9

1.	If someone asked you to measure how much the Earth weighed, how would you go about figuring it out?
2.	What would you genetically change about humans to make them a better species?
3.	Is technological progress inevitable so long as humans exist, or can it ever be stopped? Should it be stopped?
4.	Is there a form of communication you consider to be unnecessary? What is it and why don't you think we need it?

# Thinking Skills Worksheet for Class 9 (Part 2) Worksheet - 10

- 1. Should we consider colonizing the rest of the galaxy? Why or why not?
- 2. How do we define "happiness" for ourselves and how important it is in our lives?
- 3. What is the difference between "surviving" and "living"?
- 4. In your opinion, what is the most fundamentally urgent issue in our world, and why do you feel this way?

प्रणो पाराणिक कहानियां हमें समाम में जीन की सीख देती हैं। कोई रोसी सीख लिखी जिसी आपन अगपन जीवन में 3 तारा हो? प्राथ आहती के शा की पिटारा पुस्तक से अपनी मनपसंद विसी रूक कहानी की कविता रूप में लिखिए अगुना रमपूर्ण जीवन मानवता की रीवा में लागा दिया कारी मान भीतर आप गरमी की हैंदेरियों में बिसी पहाड़ी क्षेत्रा में धूमने जा रहे हैं, ती आप अपने सारा कीन सा जारारी सामान लेकर जाएं मे 905) वैक्यानिक उन्नात के कारण आजहम प्रकात से रिवासवाड कर रहे हैं। जिसके परिणाम आज हमारे शामन है। हमें दिया म्या करना चाहिए। जिससे प्रकृति का साथ हमें हमेशा मिले। उ०६) आप का युग कैप्यूटर अमेर इंटरनेट का अगितिकारी पुग है। अगाप इसका ज्योग किस-कि प्रकार करते हैं। (जल ही जीवन है और वृद-वृद्ध कीमती है।) प्राप्त) बुद्दिमानी अगर च तुराई से हर मुखितन का सामन किया जा सकता है) अपने अनुअव के आद्यार पर अवा अनापक विदया लय में शिशक - आभावक मीटिंग होती है। मीटिंग में हुई बातवीत की सेवाद रमप में लिखिए।

DAY:1

### **UNITS AROUND ME**

UNIT	APPROXIMATE SIZE
1 Millimiter (mL)	Capacity of an eyedropper
1 liter (L)	Capacity of a juice carton
1 kiloliter(KL)	Capacity of 4 bathtubs

Choose the more reasonable estimate to capacity.

1. A Fruti	A 250L	B25KL
2. A pot for cooking	G 2KL	K 2L
3. A tablespoon	M 15L	F 15ML
<b>4</b> . An automobile gas tank	N 50L	P 50KL
5. A swimming pool	Z 80L	O 80KL
<b>6</b> . A water cooler jug	H 20L	R 2L
7. A drinking glass	W25ML	B 250ML

### COMPLETE EACH STATEMENT

8.	0.5L	=ML
9.	10,000ML	=KL
<b>10</b> .	25000ML	=L
11.	1.75KL	=L
12	40KL	=ML
13	750L	=KL
14	8.5KL	=L
15	1KL	=L
16	1500ML	=L
17	500ML	=KL

DAY:2

### **LET'S PLAY WITH OPERATIONS**

**MISSING SYMBOLS**: Add symbols +, -, x,  $\div$  to make following statements correct

1.	8	2	6	3	= 14	
2.	3	2	6	4	= 32	
3.	16	4	6	1	= 10	
4.	9	8	3	2	= 7	
5.	3	3	2	3	= 1	
6.	12	3	2	2	= 0	
7.	7	4	1	3	= 9	
8.	1	8	6	3	= 1	
9.	15	5	3	7	= 2	
10.	15	3	4	8	= 11	1

### DAY:3

### **Vedic Maths Sutra**

Search any one Vedic Maths Sutra and show its application through three examples.

### DAY:4

### Construction

Construct all angles that are multiple of 15  $^{\circ}$  using compass (upto 180  $^{\circ}$  )

### **DAY:5**

Write all the Algebraic identities done in Polynomials . based on each identity , solve 3 questions.

Day :6 Lets Solve Soduku

5	3			7				
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

5				1				4
2	7	4				6		
	8		9		4			
8	1		4	6		3		2
		2		3		1		
7		6		9	1		5	8
			5		3		1	
		5				9	2	7
1				2				3

Day:7

Q1. Draw the graph of the equation 3x + y = 6. find the points where the line meets two axes.

Q2. If the number of hours for which a labourer works is  $\, x \,$  and  $\, y \,$  are his wages ( in Rupees) and

y = 2x - 1. Draw the graph of mark wager equation and hence find the wages of the labourer if he works for 6 hours, from the graph.

Q3. Find three different solutions of the equation 3x - 4y = 12 from its graph.

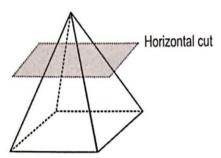
Q4. Solve the equation for x:

$$24 - 3(x - 2) = x + 18$$
.

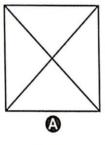
Also ,represent the solution graphically in xy – plane.

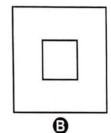
Let's Practice:

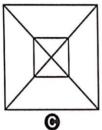
Sinjita cut a metal square pyramid horizontally along the plane shown below and removed the top portion.

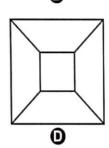


Which of these could be the TOP view of the REMAINING portion?









- If  $x^2 = t$ , which of the following is  $x^8$ ?
  - A.  $t^3$
  - $\mathbf{B}.\ t^4$
  - C.  $t^6$
  - D. 4t
- The sum of two prime numbers is ODD.

Which of these is DEFINITELY the ones digit of one of these numbers?

- **A.** 1
- **B.** 2
- C. 4
- D. 7

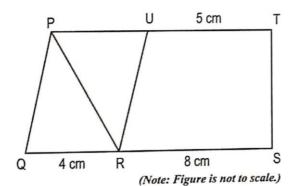
Ajay's and Pranav's classes have the same number of students. Ajay divides his class into 5 equal groups and Pranav divides his class into 10 equal groups.

Which of these is DEFINITELY true about the number of students in each of Pranav's groups when compared to the number of students in each of Ajay's groups?

- A. It is half.
- B. It is 5 less.
- C. It is double.
- D. It is 5 more.
- $5 \quad x 2 = t$

Which of the following is x + 4?

- **A.** t + 4
- **B.** t + 2
- **C.** t + 6
- **D.** t-6
- In the figure below, PQRU is a parallelogram and PRST is a trapezium.



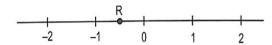
If the area of triangle PQR is 24  $\mbox{cm}^2$  , what is the area of trapezium PRST?

- A. 51 cm<sup>2</sup>
- **B.** 72 cm<sup>2</sup>
- **c.** 102 cm<sup>2</sup>
- **D.** 126 cm<sup>2</sup>
- 7.25 ÷ 0.1 = p

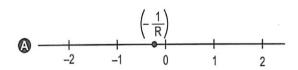
What is  $p \div 0.1$ ?

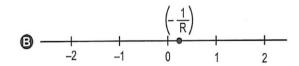
- A. 725
- B. 72.5
- C. 7.25
- **D.** 0.725

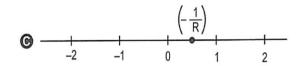
- One or more of these conditions are SUFFICIENT to conclude that a quadrilateral is a rectangle. Which ones?
  - (i) One angle in the quadrilateral is  $90^{\circ}$ .
  - (ii) The diagonals of the quadrilateral are equal.
  - (iii) The diagonals of the quadrilateral bisect each other.
  - A. only (i)
  - B. only (ii)
  - C. only (i) and (ii)
  - D. only (ii) and (iii)
- A rational number R is marked on the number line shown below.



Which of the following number lines shows the approximate location of (-  $\frac{1}{R}$  )?









- Look at the pattern below.
  - -20, -19, -18 ....
  - What is the sum of the first 42 terms of the pattern?
  - A. -42
  - **B.** 0
  - **C.** 21
  - **D.** 43