

## ARMY PUBLIC SCHOOL RK PURAM

### Holistic Personality Development (HPD) Integrated into School Curriculum 2014

Subject: Mathematics

Class: VIII

S.no.	Name of the Unit/Chapter	Activity	Personality Traits/values
1.	Rational Numbers	Value Based question on Traffic rules and usage of plastics. Use of ICT for explaining.	Global outlook, environment awareness and conservation Logical thinking and discipline
2.	Exponents	Higher order thinking question. Questions related to daily life situations where concepts of exponents are applied. Value based question on solar energy.	Self awareness, critical thinking, reasoning
3	Squares and Square Roots	Different patterns involving squares, verifying the value of square roots of non perfect squares algebraically and	Reasoning, critical

		geometrically.	thinking, confidence and curiosity
4	Cubes and Cube Roots	Value based question based on the application of cube roots. Discussion of Hardy Ramanujan numbers.	Empathy, generosity and Curiosity.
5	Playing with Numbers	Application of maths to solve puzzles and continuation of patterns. Solving of magic squares.	Reasoning, confidence, innovative mind-set
6	Algebraic Expressions.	Verification of algebraic identities through models. Preparation of charts to verify algebraic identities.	Confidence, team work , innovative mind-set.
7	Linear Equations in one variable	Value based questions on the topic “ Freedom is every living beings birth right” and “helping the needy”.	Kindness, concern for others and problem solving.
8	Percentages and its applications	Life skills questions based on the topic “No respite from filth” and “Teach India” Movement by using the concepts of percentages and its applications.	Confidence, Decision making , reasoning and self awareness.
9	Compound Interest	Value based questions on the topic “Alarming	Logical

		Population Increase” to understand and apply the concept of compound interest.	thinking, Long term vision
10	Direct and indirect variations	Value based questions on the topic “Save Water” and also Higher order thinking Skills.	Global outlook, Logical reasoning and discipline.
11	Understanding Shapes	Angle sum property of a quadrilateral, sum of exterior angles of different polygons and properties of different types of quadrilaterals (group activity). Use of ICT demonstrating.	Critical thinking, reasoning, team work
12	Constructions	Drawing with accuracy which help in visualizing many life situations. (using the instruments of geometry box). Use of ICT for demonstrating.	Confidence, discipline and self awareness
13	Representation of three Dimensional figures	Preparing the models of types of solids like Prism and Pyramids and verifying the result $V + F = E + 2$ . Use of ICT for explaining the situations. Use of ICT for demonstrating.	Global outlook, confidence , team work and positive attitude.
14	Mensuration	Preparation of charts to verify the formula for the area of a Trapezium and formula for the surface of a cuboids. Crosswords based on the formulae involved in the mensuration chapter. Value based questions on the	Global outlook, confidence , critical

		topic "SAVE TREES". Use of ICT for explaining the situations.	thinking , logical thinking and problem solving.
15	Data Handling	Drawing bar graphs on the different data collected as a survey( marks of a class in different classes or getting the information about the mother tongue of the students of class viii of their school). Use of ICT for drawing of graphs.	Team work, discipline, global outlook and positive attitude.
16	Introduction to graphs	Plotting of given points in the Cartesian plane and recognizing the type of closed figure formed by joining these points.	Logical thinking , Leadership and confidence.