

New Era High School, Panchgani

Assignment 2

Class VIII

Subject	Mathematics
CHAPTER	Square and Square roots
TIMELINE	2 nd Week (4 th May to 9 th May)
Topics	<ul style="list-style-type: none">• Introduction : Square and square root• Properties of square and square roots• Numbers between the square numbers.• Pythagorean triplet.• Square root by prime factorization.• Finding square root by repeated subtraction.
Activities	<p>Activity 1 All the family members and relatives or people residing in your complex are gathered for a function (Find out how many people will gather from your family or complex). One of them is suffering from viral fever. Let us assume that that person comes in contact with everyone during the function. Everybody in the gathering will meet at the most 2 people after gathering within 1 hour and the cycle continues every hour until they sanitize themselves. Find out how many people will be infected after gathering in the next 2 hours.</p> <p>Activity 2 Find the squares of numbers ending with 5, observe the pattern and generalize a formula to find the square of the number with 5 at its units place.</p> <p>Activity 3</p> <ul style="list-style-type: none">• List the square of the multiples of 3 eg. 3, 6, 9• Add the digits of the square and keep on adding till you get a single digit.• Write your observation and conclusion.
Moral Value	<ul style="list-style-type: none">• Keep your self-sanitized, stay away from such gathering and be at home with your family.• Pattern exists everywhere in nature as in Mathematics. If there is a pattern an order exists if an order exists any thing or a living being has a purpose of existence.
Submission	<p>Students should solve the Assignment on a paper and submit its scanned copy by May 9, 2020.</p> <p>For any queries, you may contact me on devendra.patel@nehs.in</p> <p>The hard copy to be submitted as and when you report to the school.</p> <p>Please note the above activities are part of your internal assessment and it is</p>

	mandatory.
Resource	Class VIII text book of Mathematic by N.C.E.R.T To download the textbook click the link given below http://ncert.nic.in/textbook/textbook.htm?hemh1=0-16
Questions	<ol style="list-style-type: none"> 1. Find the square of 1 to 20 numbers 2. Which of the following cannot be square roots or perfect squares? (hint: go through the properties of the square and square roots) <ol style="list-style-type: none"> a) 267 b) 524 c) 82 d) 257 3. Find the numbers between the square of two numbers given below <ol style="list-style-type: none"> a) 5 and 7 b) 12 and 13 4. Find the numbers between two square numbers. <ol style="list-style-type: none"> a) 256 and 289 b) 361 and 441 5. Find the Pythagorean triplet if the value of m is (use $2m$, m^2-1 and m^2+1 as formula) <ol style="list-style-type: none"> a) 3 b) 7 c) 8 6. Find the other two numbers of a triplet if one of them is (compare the following numbers to one of the triplet form. eg. $2m=10$ therefore $m=5$, substitute $m=5$ in m^2-1 and m^2+1) <ol style="list-style-type: none"> a) 4 b) 8 c) 15 (compare with m^2-1) d) 17 (compare with m^2+1) 7. Find the square root of the given number by repeated subtraction. (refer page no. 100) <ol style="list-style-type: none"> a) 81 b) 225 c) 484

Subject Teacher: Mr. Devendra Patel.
