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Math Comfort Test

Dear Parent / teacher,

Why conduct this Math comfort test with your children?

By class 10, most children develop a dislike for math, even math phobia. But the origins of this fear often lies in the math experience of the child in primary school. Today, due to the pandemic insecurities, long period out of school, the unsatisfactory experience of online learning, children are facing more obstacles to math learning.

If these problems are addressed in good time, we can ensure that these obstacles do not develop into a lifetime math phobia. To begin with you can yourself conduct this simple math health assessment with your children**. This is not a comprehensive examination**. **It will not measure math competency level.** It is like feeling for temperature or using a weigh machine. It is just a test of basic math comfort. You can do the assessment yourself at home.

In this assessment children should perform the activity themselves without any prompting.

How to conduct this test ?

Take it easy ! This is not a board exam. It is to be done in a playful and relaxed way, without stress for either you or your child.

Let's say your child is going into class 5 when school reopens. Commence with the class 5 test. If the child is finding that difficult, go back and ask questions from the class 4 test., and so on. Don't worry if the child has problems with the earlier class concepts. The purpose of this test is to find the level at which the child is comfortable. Math discomfort will be addressed beginning from that level.

After asking the question, don't be in a hurry. Let the child think for as long as she wants. Let her think in her own way. Forget about "getting the right answer". Do not give hints. Don't guide her to the right answer. Just note what is her response without interfering.

Is she afraid of math ? Is she friendly and comfortable with math ? At what level ? Go back to that level as much as is necessary.

It is not necessary to complete the test at one go. It can be done over a few days.

A child entering into class 1 when schools open

1. Show two fingers of one hand and three fingers of the other hand and ask 'How many fingers?' (Do not say the words two, three). Give your child some time to think.
   - Did she say 'five' directly by looking at the fingers?
   - Did she count and answer?
   - Did she struggle?
2. Give a handful of one-rupee coins. Ask the child to give you **eight** coins from that.
3. Give a handful of one-rupee coins. Ask the child to give you **fifteen** coins from that.
4. Give a handful of one-rupee coins. Ask the child to give you **twenty** coins from that.
5. Ask the child to take a handful of peanuts. Ask her to count **how many**. Do not say anything while she counts. Just observe.
6. Show a number 9 written on a piece of paper. Ask her to count and give you that many peanuts. Repeat with number 12 written on the paper.

7. I ate 3 rotis for lunch and 2 rotis for dinner. How many total rotis did I eat?

A child entering into class 2 when schools open

1. Give your child ten notes of ten-rupee and a lot of one rupee coins.
2. Ask him to give you thirty rupees. Observe how he does it.
3. Show a ten rupee note. Say 'these are ten rupees.' Take a one-rupee coin with it. Ask 'how many rupees'. If required, introduce 'ten and one

is eleven'. Take one more coin. Ask 'how many' ? Repeat this till you reach twenty.

4. Show three notes of ten-rupees. Ask 'How many?'
5. Ask the child to give you thirty-two rupees.
6. I ate 3 rotis for lunch and 2 rotis for dinner. How many total rotis did I eat?
7. What is four plus two?
    a. Did he answer directly?
    b. Did he ask for paper pencil? Did he draw and count fingers or circles?
    c. Did he count using fingers?
8. Write 7 + 4 =   on a piece of paper. Observe how she finds the answer.

A child entering into class 3 when schools open

1. Keep some ten-rupee notes and one rupee coins.
    o Give me forty rupees
    o Give me seventy five rupees
2. Give a ten-rupee note to the child and say 'can you please give me change of this?' Observe what she does.
3. Give ten of one-rupee coins to the child. Ask her to give a note of the same value.
4. If you have twelve rupees and I have eleven rupees, how many rupees together do we have? Observe how she does it. Ask her to show it using currency notes.
5. We have a note of hundred rupees. We purchased vegetables of **ninety** rupees. How many rupees are left with us?
6. We have a note of hundred rupees. We purchased vegetables of **eighty-five** rupees. How many rupees are left with us?

7. Let's together make a long list of all rectangular objects around us. (Child may add cubes also in this. Accept them also at this stage.)
8. Now make a list of square objects.
9. Four children ate three rotis each. How many rotis did they eat in all.
10. Write the number twenty five in numerals. Write seventy six in numerals.

A child entering into class 4 when schools open

1. Give a bowlful of peanuts to the child. Ask him/her to count the peanuts. Observe how the child counts it. Did she count one by one? Did she count in groups? Groups of how many?
2. Give the child notes of hundred, notes of ten and one rupee coins. Ask her to do the following :
    a. Give me two hundred rupees. Write this number.
    b. Give me two hundred and five rupees. Write this number.
    c. Give me seven hundred and twenty eight rupees. Write in numbers.
3. Write 802 on a piece of paper. Show this to the child and ask her to give those many rupees. (Do not read aloud the number)
4. Write 540 on a piece of paper. Show this to the child and ask her to give those many rupees. (Do not read aloud the number)

5. If you have three hundred and forty rupees and I have one hundred and sixty rupees, how many rupees do we have in all? Observe what the child is doing. Ask the child to show this using currency notes.
6. Write the following addition   340 + 120
   Ask the child to do it with pencil and paper.
7. We have a note of five hundred rupees. If we buy vegetables of one hundred and twenty rupees, how much money will be left with us?

8. Write the following subtraction 550 – 120 . Ask the child to do it.

9. If we want to give five rupees to each child, how many rupees will be required for six children?

10. Show 4 x 6 written on a piece of paper. Ask the child to read this. Ask, what it means. How will you do it? What is the answer?

11. Draw a triangle using scale on a paper. Cut it out. Draw and cut out a quadrilateral from the other paper. Let's make a list of what is same and what is different in these two shapes.

A child entering into class 5 when schools open

1. Give a bowlful of peanuts to the child. Ask him/her to count the peanuts. Observe how the child counts it. Did she count one by one? Did she count in groups? Groups of how many?

2. Take notes of hundred and ten rupees and one-rupee coins.

3. Cut 5 cards of the size of playing cards. Write 1000 on each card. These are your 1000 rupee notes.

4. Ask the child to do the following using these notes.

    a. Give me three thousand two hundred rupees. Write this number.

    b. Give me four thousand twenty rupees. Write this number.

    c. Give me five thousand six rupees. Write this number.

5. You have three hundred and forty rupees. I have one hundred and sixty rupees. How many rupees do we have in all? Observe how the child does it. Ask the child to show it using currency notes.

6. We went to the market with a five hundred rupees note. We bought vegetables of one hundred and twenty rupees. How much money will we get back?

7. If we have to give eleven rupees to each child, how many rupees will be needed for six children?

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8. If we divide two hundred rupees equally among four children, how many rupees will each one get?

9. Write 8 x 6 on a piece of paper. Read this. What is the meaning of this? How will you find it? What is the answer?

10. Write 30 ÷ 5 on a piece of paper. Read this. What is the meaning of this? How will you find it? What is the answer?

11. Draw a triangle using scale on a paper. Cut it out. Draw and cut out a quadrilateral from the other paper. Let's make a list of what is same and what is different in these two shapes.

12.   1000 + 340 + 2000

13.   1000 – 300

14.   1000 – 350

15.   What is 2 x 3 x 4 ?

A child entering into class 6,7,8 when schools open

Have a chat with your child about the following points :

1. Who is your favourite teacher?

2. Which subject do you like the most?

3. Do you like going to school? Or do you prefer online? Why?

4. Do you like math or are you scared of math? What exactly do you like about math? Why?

5. If you are scared of math, why do you feel so?

Give the following test after this chat. Don't be in a hurry of getting the right answer. Observe his/her thinking process. Is the child uncertain? Is she confident?

A child entering into class 6 when schools open

1. Write the number 'Two Lakh'?
2. If I have 4 notes of Rs.1000 and 8 coins of Rs.1, how many rupees do I have? Write this number.
3. I have 2999 rupee. If I add one rupee to it, how many rupees will I have in all? Write that number.
4. What do you get when you add five thousand to ten thousand? Write the number.
5. Add : 7543 + 2483 . You can use currency notes or paper pencil.
6. What is 1000 minus 50?
7. Subtract : 3024 – 573. You can use currency notes or paper pencil.
8. There are 6 children in each group. How many children in all in 5 such groups?
9. Multiply : Use any method.

    7 X 5

    18 X 4

    25 X 42 .

10. There are 30 children in a class. Teacher wants to make equal groups. No child should be left out. Can she make groups of 10 children in each group? How many groups will be made ?
    If there are five in each group, how many groups will be formed ?
11. From a class, half of the children are playing and half are reading. If 25 children are playing how many children are there in the class in all?
12. Divide : You may use notes or paper pencil.

    8 ÷ 2

    78 ÷ 3

$$612 \div 6$$

$$512 \div 16$$

13.

$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$$

14.

$$\frac{1}{2} + \frac{1}{3} =$$

15. $2 - \frac{1}{2} =$

16. Do you like Maths? Please select option from below:

Option 1: Not at all

Option 2: A little bit

Option 3: A lot

A child entering into class 7 when schools open

1. Write number – two crores.
2. If I have 2 notes of thousand rupees, 2 notes of hundred rupees and 2 coins of 1 rupee, how much money do I have? Write the number.
3. Write the number after 29999
4. What is the number that you will get if you add five thousand to one lakh?
5. What is the number that you will get if you subtract one hundred from ten thousand?

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6. There are 6 divisions of class 7 in a school. Each division has 40 students. How many students of class 7 are there in the school?

7. Multiply : 25 X 42

8. Rs. 150/- are distributed amongst 5 children equally. How much money will each child get?

9. Divide : $981 \div 9$

10. A movie theatre has half of the chairs occupied and the remaining half are vacant. If the number of vacant chairs is 250, what is the total number of chairs in the theatre?

11. Give a rectangular piece of paper to the child. Ask him/her to explain and show what is area and what is perimeter. Ask him/her to find perimeter and area of the rectangle by measuring the sides. Don't give importance to right answer. Observe how the child is thinking. Is she confident? Is she comfortable in handling things? Is the comfortable in measuring? etc

12.

$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$$

$$\frac{1}{2} + \frac{1}{3} =$$

$$2 - \frac{1}{2} =$$

13.

$$2 + 1.5 =$$

$$1.5 + 2.6 =$$

$$3 \times 1.5 =$$

$$\frac{3.6}{3} =$$

14. Do you like Maths? Please select option from below:

Option 1: Not at all

Option 2: A little bit

Option 3: A lot

A child entering into class 8 when schools open

1. Write the number 'Two crore, Twenty lakh, Two thousand and two.
2. What is the square-root of 25?
3. Write factors of number 6.
4. Is 4970 divisible by 5?
5. In a cricket match, a team scored 100 runs in 20 overs. How many runs did they score on average in each over? (what was the run rate?)
6. 4 children take 2 days to paint a wall in the school. How many days would 8 children take to paint the same wall?
7. Cost of 4 notebooks is 80 rupees. What is the cost of 15 such notebooks?
8.

$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$$

$$\frac{1}{2} + \frac{1}{3} =$$

$$2 - \frac{1}{2} =$$

9. $2 + 1.5 =$
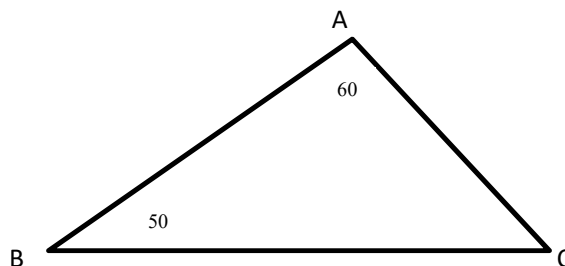
$1.5 + 2.6 =$

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$3 \times 1.5 =$

$$\frac{3.6}{3} =$$

10. A bicycle was purchased at Rs. 10000/- and was sold at Rs. 12000/-. Was there a profit or loss? How much?

11. $x + 2 = 5$ Find the value of x

12. $x - 3 = 4$ Find the value of x

13. $3x = 12$ Find the value of x

14. $\frac{X}{2} = 6$ Find the value of X.

15. A triangle has vertices, sides etc. What else does it have? Write one more name.

16. We have learnt Pythagorus theorem. Do you know the type of Triangle associated with this theorem?

17. Draw the triangle shown below and find the side AC.
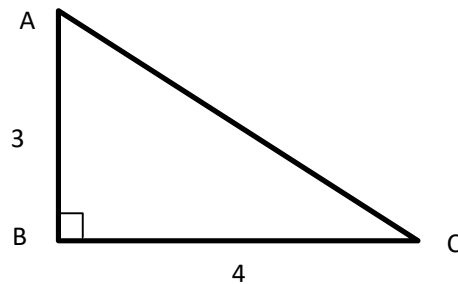
18. What is the sum of all angles of a triangle?

19. Find out the angle C from given triangle below.

20.   Do you like Maths? Please select option from below:

Option 1: Not at all

Option 2: A little bit

Option 3: A lot