

ESTIMATION

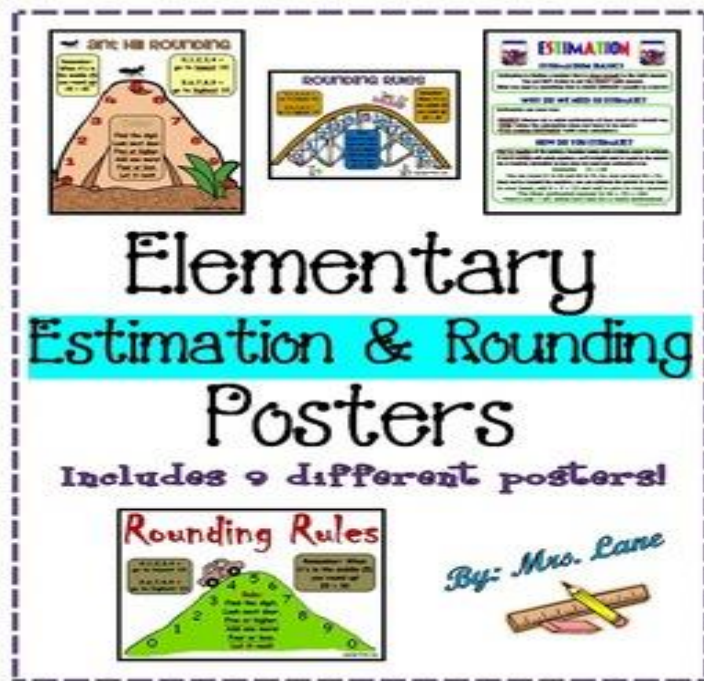
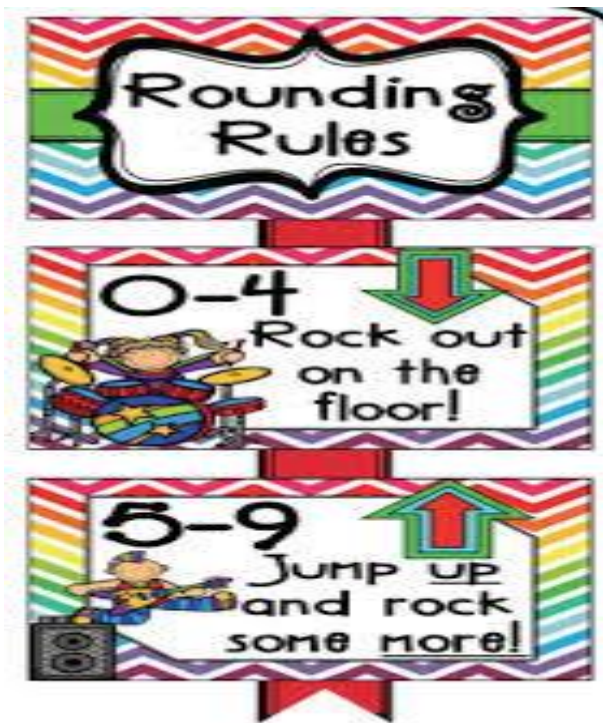
SUBJECT : MATHEMATICS
CHAPTER NUMBER: 02
CHAPTER NAME : NUMBER SYSTEM
SUB TOPIC: Problem solving based on Estimation of Numbers
PERIOD NO:3

CHANGING YOUR TOMORROW

Learning outcomes

- *Student will be able to estimate the quotient.
- *Student will be able do approximation.
- *Student will be able to apply approximation in real life situation

Problem solving based on Estimation of Numbers



Previous Knowledge Test

1..Estimate the sums by rounding off to the nearest thousands

i) $7789 + 569$

ii) $8976 + 43565$.

2. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens) :

(a) $439 + 334 + 4,317$

(b) $1,08,734 - 47,599$

(c) $8325 - 491$

(d) $4, 89,348 - 48,365$

Estimation of quotient will be explained with the help of a video.

<https://www.youtube.com/watch?v=dQcF0Q2WcfE>

Problem solving based on Estimation of Numbers

Q.1. Estimate the following by converting each of them to nearest ten

i. $484/42$

ii. $198/24$

Solutions:

i) $484 \div 42$

$484 \div 42$ is approximately (to the nearest 10) equal to

$$480 \div 40 = 12$$

ii) $198 \div 24$

$198 \div 24$ is approximately (to the nearest 10) equal to

$$200 \div 20 = 10$$

Evaluation Questions

Q7 Estimate each of the following products by rounding off each number to the nearest ten :

(i) 49×52

Solution:

(i) 49 to the nearest ten = 50 and

52 to the nearest ten = 50

\therefore Required product = (50×50)

= 2500

Evaluation Questions

8. Estimate each of the following products by rounding off each number to the nearest hundred :

(i) 477×213

Solution

(i) 477×213

477 to the nearest hundred = 500 and

213 to the nearest hundred = 200

∴ Required product = (500×200)

= 100000

Evaluation Questions

10. Estimate each of the following quotients by converting each number to the nearest ten:

(i) $87 \div 28$

(ii) $84 \div 23$

Solutions

(i) $87 \div 28$

$87 \div 28$ is approximately (to the nearest 10) equal to

$$90 \div 30 = 3$$

(ii) $84 \div 23$

$84 \div 23$ is approximately (to the nearest 10) equal to

$$80 \div 20 = 4$$

Home assignment

AHA

Q1. Find the estimated sum of 4,380 and 18,765 to the nearest thousand.

Q2. Estimate the quotient by rounding off to nearest ten

a) $283/7$ b) $314/6$ c) $6217/7$

d) $2758/96$ e) $4423/21$

HW
EX 2.B Q.NO. 9

THANKING YOU
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