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SESSION : 13
CLASS : 3
SUBJECT : MATHEMATICS
CHAPTER NUMBER: 5
CHAPTER NAME : MULTIPLICATION
SUBTOPIC : MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

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LEARNING OBJECTIVE :

The children will

*** Solve double digit multiplication problems.**

*** Students will multiply two two-digit numbers correctly.**

*** Students will use multiple strategies for multiplying two-digit numbers.**

*** Understand how to multiply larger numbers by using related facts.**

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

EXPLANATION:

```
  22
x 11
----
  22
```

1. Multiply by the one's place.

```
  22
x 11
----
  22
   0
```

2. Put a zero to hold the one's place.

```
  22
x 11
----
  22
 220
```

3. Multiply by the ten's place.

```
  22
x 11
----
  22
+220
----
 242
```

4. Add the numbers and get the product.

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Begin with multiplying the bottom ones place with top ones place.

$$\begin{array}{r} 2\ 4 \\ \times\ 1\ 2 \\ \hline 8 \end{array}$$

MULTIPLICATION

EASILY EXPLAINED !!

As 2 x 4 = 8
So, we write 8 in ones place.

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

MULTIPLICATION

easily explained !!

Then multiply the bottom ones place with top tens place.

$$\begin{array}{r} 2\ 4 \\ \times\ 1\ 2 \\ \hline 4\ 8 \end{array}$$

As 2 x 2 = 4, So,we write 4 in tens place.

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

We need to write a 0 or X below the ones place as we are going to multiply with tens and to hold the place.

$$\begin{array}{r} 24 \\ \times\ 12 \\ \hline 48 \\ 0 \end{array}$$

MULTIPLICATION

easily explained !!

So,we write 0 in ones place below 8.

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Then multiply the bottom tens place with top ones place.

$$\begin{array}{r} 24 \\ \times\ 12 \\ \hline 48 \\ 40 \end{array}$$

MULTIPLICATION

EASILY EXPLAINED !!

As 1 x 4 = 4, So,we write 4 in tens place.

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Next multiply the bottom tens place with top tens place.

$$\begin{array}{r} 24 \\ \times\ 12 \\ \hline 48 \\ 240 \\ \hline \end{array}$$

MULTIPLICATION

EASILY EXPLAINED !!

As 1 x 2 = 2, So,we write 2 in hundreds place.

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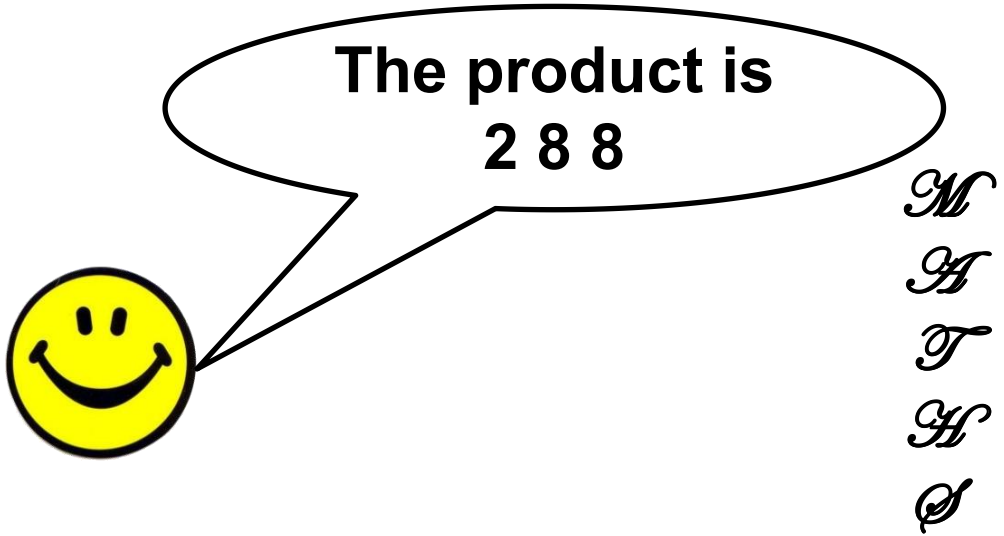
MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

$$\begin{array}{r} 2\ 4 \\ \times\ 1\ 2 \\ \hline 4\ 8 \\ +\ 2\ 4\ 0 \\ \hline 2\ 8\ 8 \end{array}$$

ADD



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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Exercise-5 B (1 to 8)
bk. pg. 77
in notebook.

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Multiply the following.

①

$$\begin{array}{r} 10 \\ \times\ 16 \\ \hline 60 \\ +\ 100 \\ \hline 160 \end{array}$$

②

$$\begin{array}{r} 17 \\ \times\ 11 \\ \hline 17 \\ +\ 170 \\ \hline 187 \end{array}$$

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

③

$$\begin{array}{r} 11 \\ \times\ 15 \\ \hline 55 \\ +\ 110 \\ \hline 165 \end{array}$$

④

$$\begin{array}{r} 12 \\ \times\ 14 \\ \hline 48 \\ +\ 120 \\ \hline 168 \end{array}$$

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

⑤

$$\begin{array}{r} 14 \\ \times\ 11 \\ \hline 14 \\ +\ 140 \\ \hline 154 \end{array}$$

⑥

$$\begin{array}{r} 23 \\ \times\ 13 \\ \hline 69 \\ +\ 230 \\ \hline 299 \end{array}$$

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MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

⑦

$$\begin{array}{r} 33 \\ \times\ 32 \\ \hline 66 \\ 1\ \ \ \\ +\ 990 \\ \hline 1056 \end{array}$$

⑧

$$\begin{array}{r} 41 \\ \times\ 12 \\ \hline 82 \\ +\ 410 \\ \hline 492 \end{array}$$

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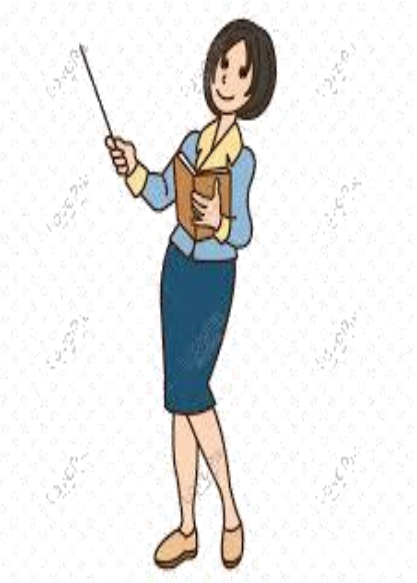

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Can you say in a minute ??????

$$63 \times 67 = 4221$$

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

EXPLANATION:

LET US SEE

$$\begin{array}{r} 7 \\ 6\ 3 \\ \times\ 6\ 7 \\ \hline = 4\ 2\ 2\ 1 \end{array}$$

BUT.. BUt.. But.. but.. but..

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MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)

Yes..... It is possible only when

3 + 7 = 10

6 3 x 6 7 = 4 2 2 1

*** First both the tens place of the 2-digit numbers should be same.**

*** Secondly the sum of ones place should be equal to 10 .**

WHAT'S

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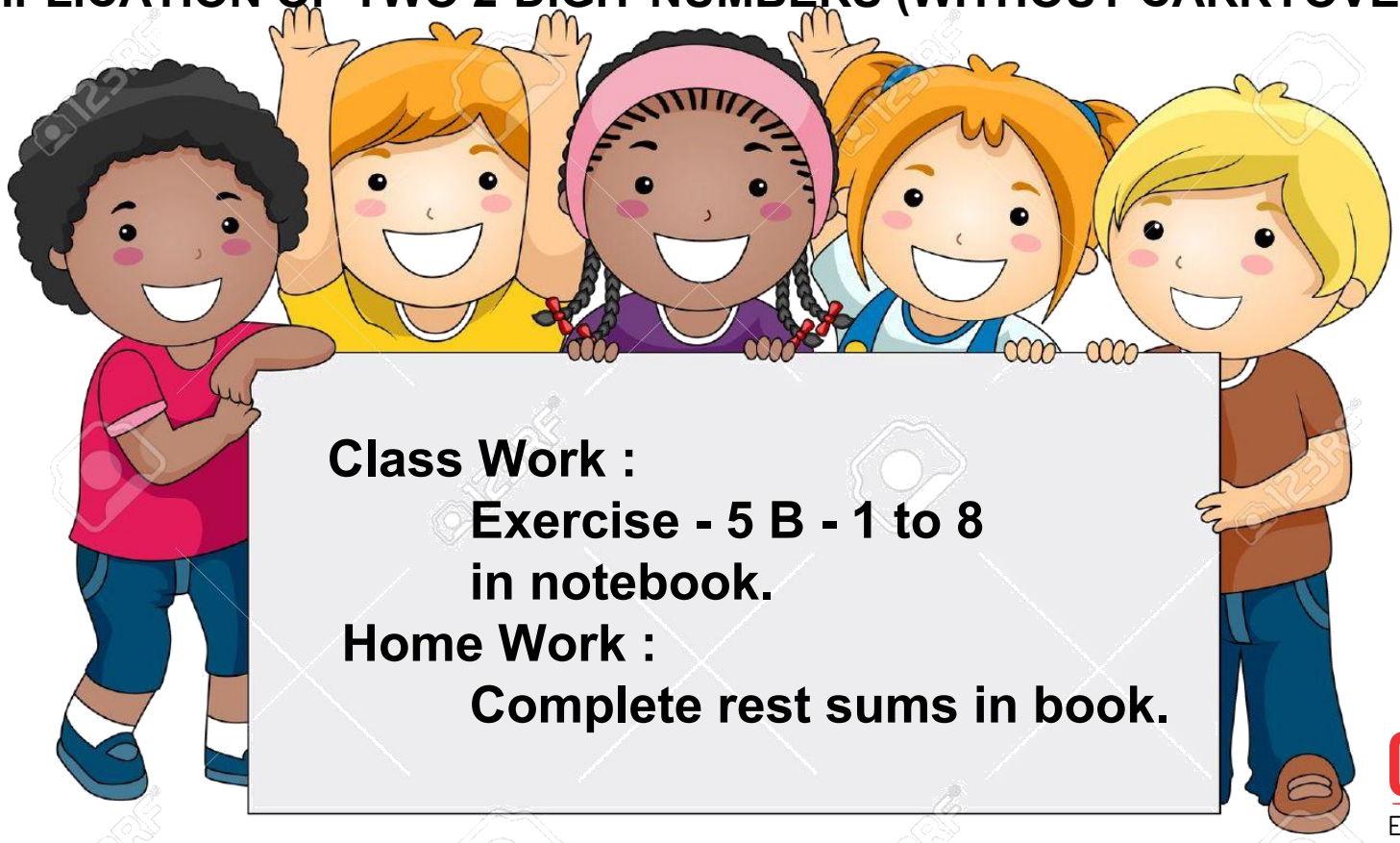
MULTIPLICATION

MULTIPLICATION OF TWO 2-DIGIT NUMBERS (WITHOUT CARRYOVER)



Class Work :

Exercise - 5 B - 1 to 8
in notebook.

Home Work :

Complete rest sums in book.

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LEARNING OUTCOME:

Children are confident of solving double digit multiplication problems. They will be able to multiply two two-digit numbers correctly. They will also be able to use multiple strategies for multiplying two-digit numbers and will also be able to apply related facts to multiply larger numbers.

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