Suggestions for Implementing Grouped Computation Activities

Pens or Pencils along with **scratch paper** organized with 4 regions on the front **and** 4 regions on the back. Scratch paper regions are **labeled with name of number type** and students can start with any number type. Students should be encouraged to use **any or all** of Times Table **and/or** Column Facts **and/or** Calculator.

After completion of Grouped Computation Activities, students are responsible to grade their own papers.

During the grading of Computation Activities, students need to identify with a mark any wrong answers.

Students have a tendency to erase wrong answers and quickly replace with right answers. Do not allow!

Replacing right answers with wrong answers does allow students a chance to actually learn why it is wrong..

After students have graded the activities, they determine why they missed and correct, showing all work.

Usually, stronger students finish activities first and they can correct wrong answers with little or no help.

As challenged students finish grading, all students strong and challenged gather in collaborative teams.

These Collaborative Teams should be carefully selected and grouped with a strong student as leader.

There should not be more than 3 in a Collaborative Team with one strong leader helping challenged.

Team Leaders assist challenged students to understand reasons why problems are wrong and to correct.

If not enough students are strong enough to be Team Leaders then challenged work with challenged.

Teachers mingle throughout the classroom, when asked about a problem; suggest a leader to answer it.

If a Team Leader has tried but has not helped others to understand then the Teachers should intervene.

First and foremost, students should always be helping students while Teachers facilitates teamwork.

Completing, Grading, Correcting, and Collaborating (discussing solutions) should be a class period!

All student activities with scratch paper are securely stored in an individual class folder for later use.

Many students, strong and challenged, will want another activity, if have completed with good scores!

Computational Activities alternating with Conceptual provide a well balanced learning environment.

Students may want to take a Activity home for practice or to show parents! Great! But Extra One!

Additional classroom or WWW activities are encouraged to provide practice with all Number Types

Real World Mathematics Problems (4A)

$$2/3 \times 4 =$$

$$.23 \times 4 =$$

$$4 - 1 \ 2/3 =$$

$$.8 - 3/5 =$$

$$2 1/2 \times 5 =$$

$$3/4 \times .02 = ____$$

$$3^2 + \sqrt{4} =$$

$$\sqrt{81} - 70 =$$

$$2^3 \times \sqrt{9} =$$

$$.07 \times 11/4 =$$

$$\sqrt{64} / 51 =$$

Real World Mathematics Problems (4B)

$$2/3 \times 8 =$$

$$8 \times .03 =$$

$$.7 - 1/4 =$$

$$2 \frac{1}{3} \times 5 =$$

$$3/5 \times .03 =$$

$$2/13/5 =$$

$$\sqrt{25} + 6^1 =$$

$$7^2 - \sqrt{36} =$$

$$\sqrt{16} \times 9^0 =$$

.04 x 1
$$1/2 =$$

$$4^{3} / \sqrt{49} =$$

$$12\%$$
 of ____ = 6

Real World Mathematics Problems (4C)

$$2/5 \times 3 =$$

.12 x 4 =
$$_$$

$$.03 + 1/2 =$$

$$6 - 1 \ 2/5 =$$

$$.6 - 2/5 =$$

$$2 \frac{1}{4} \times 5 =$$

$$3/5 \times .02 =$$

$$5^3 + \sqrt{9} =$$

$$\sqrt{16} - 6^0 =$$

$$81 x \sqrt{4} =$$

$$.6 \times 1 \frac{1}{4} = \underline{}$$

$$\sqrt{64}$$
 / 7 1 = ____

$$.08:.6=.04:$$

Real World Mathematics Problems (4D)

$$7 - 3/4 =$$

$$2/5 \times 9 =$$

$$9 \times .02 = ____$$

$$.9 - 3/4 =$$

$$2 \frac{1}{5} \times 6 =$$

$$3/4 \times .3 =$$

$$2/12/5 =$$

$$\sqrt{25} + 90 =$$

$$3^2 - \sqrt{81} =$$

$$\sqrt{49} \ x \ 4^{1} =$$

$$.3 \times 13/4 =$$

$$2^3 / \sqrt{36} =$$

Real World Mathematics (4A)

$$3/4 + 2 = 23/4$$

$$.4 + 2 = 2.4$$

$$3 - 4/5 = 21/5$$

$$2 - .7 = 1.3$$

$$2/3 \times 4 = 22/3$$

$$.23 \times 4 = .92$$

$$5 / 1/2 = 10$$

$$6 / .8 = 7.5$$

$$2 1/4 + 3 = 5 1/4$$

$$.03 + 1/4 = .28$$

$$4 - 1 \ 2/3 = 2 \ 1/3$$

$$.8 - 3/5 = \underline{.2}$$

$$2 \frac{1}{2} \times 5 = \frac{12 \frac{1}{2}}{2}$$

$$3/4 \times .02 = .015$$

$$.3 / 3/5 = \underline{.5}$$

$$3^2 + \sqrt{4} = 11$$

$$.05 + 1 \ 3/5 = \underline{1.65}$$

$$\sqrt{81} - 70 = 8$$

$$2 \frac{1}{2} - .6 = \underline{1.9}$$

$$2^3 \times \sqrt{9} = 24$$

$$.07 \times 11/4 = .0875$$

$$\sqrt{64} / 5^1 = 13/5$$

$$2 \frac{1}{5} / .4 = \underline{5.5}$$

$$1/2:1/3=3/8:1/4$$

7 is
$$35\%$$
 of 20

$$.06:.3=.4:\underline{.2}$$

15% of
$$40 = 6$$

$$1/3:\underline{2/9}=1/4:1/6$$

$$.8 : .04 = .6 : .03$$

Real World Mathematics (4B)

$$3/4 + 7 = 73/4$$

$$.04 + 7 = 7.04$$

$$6 - 1/5 = 54/5$$

$$6 - .05 = 5.95$$

$$2/3 \times 8 = 51/3$$

$$8 \times .03 = 2.4$$

$$9 / 1/2 = 18$$

$$9 / .2 = 45$$

$$2 \frac{1}{5} + 4 = 6 \frac{4}{5}$$

$$.03 + 1/5 = .23$$

$$5 - 1 \ 3/4 = 3 \ 1/4$$

$$.7 - 1/4 = .45$$

$$2 \frac{1}{3} \times 5 = \frac{11 \frac{2}{3}}{3}$$

$$3/5 \times .03 = .018$$

$$2/13/5 = 11/4$$

$$.04 / 1/2 = .08$$

$$\sqrt{25} + 6^1 = 11$$

$$.03 + 1 \ 2/5 = \underline{1.43}$$

$$7^2 - \sqrt{36} = 43$$

$$2 \ 1/4 - .6 = \underline{1.65}$$

$$\sqrt{16} \times 9^0 = \underline{4}$$

$$.04 \times 1 \ 1/2 = \underline{.06}$$

$$4^{3} / \sqrt{49} = 91/7$$

$$2 \frac{3}{5} / .4 = \underline{6.5}$$

$$1/3:1/2=\underline{1/6}:1/4$$

$$.02 : .3 = .4 : \underline{6}$$

$$12\% \text{ of } \underline{50} = 6$$

$$1/5: \underline{2/15} = 1/4: 1/6$$

$$\underline{.6}$$
 : .03 = .8 : .04

Real World Mathematics (4C)

$$4/5 + 2 = 24/5$$

$$.43 + 2 = 2.43$$

$$3 - 3/4 = 21/4$$

$$3 - .67 = 2.33$$

$$2/5 \times 3 = 11/5$$

$$.12 \times 4 = .48$$

$$5 / 1/3 = 15$$

$$5 / .4 = 12.5$$

$$2 \frac{1}{2} + 5 = \frac{7 \frac{1}{2}}{2}$$

$$.03 + 1/2 = .53$$

$$6 - 1 \ 2/5 = 4 \ 3/5$$

$$.6 - 2/5 = .2$$

$$2 \frac{1}{4} \times 5 = \frac{11 \frac{1}{4}}{4}$$

$$3/5 \times .02 = .012$$

$$2 / 1 1/5 = 1 2/3$$

$$.5 / 1/4 = 2$$

$$5^3 + \sqrt{9} = 128$$

$$.2 + 13/5 = 1.8$$

$$\sqrt{16} - 6^0 = \underline{3}$$

$$2 \ 1/2 - .04 = \ \underline{2.46}$$

$$81 x \sqrt{4} = 16$$

$$.6 \times 11/4 = .75$$

$$\sqrt{64} / 7^{1} = 91/7$$

$$23/5 / .2 = 13$$

$$1/2:1/3=\frac{3/10}{1}:1/5$$

$$.08 : .6 = .04 : .3$$

$$18 \% \text{ of } \underline{400} = 72$$

$$1/3 : \underline{2/9} = 1/4 : 1/6$$

$$1.2 : .04 = .6 : .02$$

Real World Mathematics (4D)

$$4/5 + 6 = 64/5$$

$$.43 + 6 = 6.43$$

$$7 - 3/4 = 61/4$$

$$7 - .17 = 6.83$$

$$2/5 \times 9 = 33/5$$

$$9 \times .02 = .18$$

$$8 / 1/3 = 24$$

$$3 / .6 = 5$$

$$2 \frac{1}{3} + 3 = \frac{5 \frac{1}{3}}{3}$$

$$.07 + 1/4 = .32$$

$$4-15/6 = 31/6$$

$$.9 - 3/4 = .15$$

$$2 \frac{1}{5} \times 6 = \frac{13 \frac{1}{5}}{}$$

$$3/4 \times .3 = .225$$

$$2/12/5 = 13/7$$

$$.2 / 2/5 = .5$$

$$\sqrt{25} + 9^0 = \underline{6}$$

$$.4 + 1 \frac{1}{5} = \underline{1.6}$$

$$3^2 - \sqrt{81} = \underline{0}$$

$$2 \frac{1}{4} - .08 = 2.17$$

$$\sqrt{49} \times 4^1 = \underline{28}$$

$$.3 \times 13/4 = .525$$

$$2^3 / \sqrt{36} = 11/3$$

$$2 \frac{4}{5} / .4 = 7$$

$$1/5:1/7 = \frac{7/20}{1}:1/4$$

$$.9 : .3 = .6 : .2$$

$$16 \% \text{ of } \underline{200} = 32$$

$$1/2$$
: $1/3 = 1/4$: $1/6$

$$\underline{18}$$
 is 60 % of 30

$$1.6 : .06 = .8 : .03$$