

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.

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

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**.

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

Real World Mathematics (5E)

$$+2 + +6 = \underline{\quad}$$

$$+3 + -8 = \underline{\quad}$$

$$3/4 + 2 = \underline{\quad}$$

$$.4 + 2 = \underline{\quad}$$

$$2 \frac{1}{4} + 3 = \underline{\quad}$$

$$.03 + 1/4 = \underline{\quad}$$

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

$$.05 + 1 \frac{3}{5} = \underline{\quad}$$

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

$$7 \text{ is } \underline{\quad}\% \text{ of } 20$$

$$-3 + -7 = \underline{\quad}$$

$$-2 + +9 = \underline{\quad}$$

$$3 - 4/5 = \underline{\quad}$$

$$2 - .7 = \underline{\quad}$$

$$4 - 1 \frac{2}{3} = \underline{\quad}$$

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

$$\sqrt{81} - 7^0 = \underline{\quad}$$

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

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

$$15\% \text{ of } \underline{\quad} = 6$$

$$+4 + -9 = \underline{\quad}$$

$$+5 + +7 = \underline{\quad}$$

$$2/3 \times 4 = \underline{\quad}$$

$$.23 \times 4 = \underline{\quad}$$

$$2 \frac{1}{2} \times 5 = \underline{\quad}$$

$$3/4 \times .02 = \underline{\quad}$$

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

$$.07 \times 1 \frac{1}{4} = \underline{\quad}$$

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

$$\underline{\quad} \text{ is } 30\% \text{ of } 40$$

$$-5 + +8 = \underline{\quad}$$

$$-4 + -6 = \underline{\quad}$$

$$5 \div 1/2 = \underline{\quad}$$

$$6 \div .8 = \underline{\quad}$$

$$2 \div 1 \frac{4}{5} = \underline{\quad}$$

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

$$\sqrt{64} \div 5^1 = \underline{\quad}$$

$$2 \frac{1}{5} \div .4 = \underline{\quad}$$

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

$$125\% \text{ of } 12 \text{ is } \underline{\quad}$$

Real World Mathematics (5F)

$-5 - +9 = \underline{\quad}$

$-4 - -7 = \underline{\quad}$

$3/4 + 7 = \underline{\quad}$

$.04 + 7 = \underline{\quad}$

$2 \frac{1}{5} + 4 = \underline{\quad}$

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

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

$.03 + 1 \frac{2}{5} = \underline{\quad}$

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

$9 \text{ is } \underline{\quad}\% \text{ of } 20$

$+2 - +7 = \underline{\quad}$

$+3 - -9 = \underline{\quad}$

$6 - 1/5 = \underline{\quad}$

$6 - .05 = \underline{\quad}$

$5 - 1 \frac{3}{4} = \underline{\quad}$

$.7 - 1/4 = \underline{\quad}$

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

$2 \frac{1}{4} - .6 = \underline{\quad}$

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

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

$-3 - -6 = \underline{\quad}$

$-2 - +8 = \underline{\quad}$

$2/3 \times 8 = \underline{\quad}$

$8 \times .03 = \underline{\quad}$

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

$3/5 \times .03 = \underline{\quad}$

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

$.04 \times 1 \frac{1}{2} = \underline{\quad}$

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

$\underline{\quad} \text{ is } 70\% \text{ of } 40$

$+4 - -8 = \underline{\quad}$

$+5 - +6 = \underline{\quad}$

$9 / 1/2 = \underline{\quad}$

$9 / .2 = \underline{\quad}$

$2 / 1 \frac{3}{5} = \underline{\quad}$

$.04 / 1/2 = \underline{\quad}$

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

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

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

$175\% \text{ of } 16 \text{ is } \underline{\quad}$

Real World Mathematics (5G)

$+2 \times +6 = \underline{\quad}$

$+3 \times -9 = \underline{\quad}$

$4/5 + 2 = \underline{\quad}$

$.43 + 2 = \underline{\quad}$

$2 \frac{1}{2} + 5 = \underline{\quad}$

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

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

$.2 + 1 \frac{3}{5} = \underline{\quad}$

$1/2 : 1/3 = \underline{\quad} : 1/5$

$3 \text{ is } \underline{\quad} \% \text{ of } 20$

$-3 \times -7 = \underline{\quad}$

$-2 \times +8 = \underline{\quad}$

$3 - 3/4 = \underline{\quad}$

$3 - .67 = \underline{\quad}$

$6 - 1 \frac{2}{5} = \underline{\quad}$

$.6 - 2/5 = \underline{\quad}$

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

$2 \frac{1}{2} - .04 = \underline{\quad}$

$.08 : .6 = .04 : \underline{\quad}$

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

$+4 \times -8 = \underline{\quad}$

$+5 \times +7 = \underline{\quad}$

$2/5 \times 3 = \underline{\quad}$

$.12 \times 4 = \underline{\quad}$

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

$3/5 \times .02 = \underline{\quad}$

$8^1 \times \sqrt{4} = \underline{\quad}$

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

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

$\underline{\quad} \text{ is } 40 \% \text{ of } 80$

$-5 \times +9 = \underline{\quad}$

$-4 \times -6 = \underline{\quad}$

$5 \div 1/3 = \underline{\quad}$

$5 \div .4 = \underline{\quad}$

$2 \div 1 \frac{1}{5} = \underline{\quad}$

$.5 \div 1/4 = \underline{\quad}$

$\sqrt{64} \div 7^1 = \underline{\quad}$

$2 \frac{3}{5} \div .2 = \underline{\quad}$

$\underline{\quad} : .04 = .6 : .02$

$250 \% \text{ of } 18 \text{ is } \underline{\quad}$

Real World Mathematics (5H)

$+6 / +3 = \underline{\quad}$

$+21 / -7 = \underline{\quad}$

$4/5 + 6 = \underline{\quad}$

$.43 + 6 = \underline{\quad}$

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

$.07 + 1/4 = \underline{\quad}$

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

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

$1/5 : 1/7 = \underline{\quad} : 1/4$

$8 \text{ is } \underline{\quad} \% \text{ of } 20$

$-8 / -2 = \underline{\quad}$

$-18 / +6 = \underline{\quad}$

$7 - 3/4 = \underline{\quad}$

$7 - .17 = \underline{\quad}$

$4 - 1 \frac{5}{6} = \underline{\quad}$

$.9 - 3/4 = \underline{\quad}$

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

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

$.9 : .3 = .6 : \underline{\quad}$

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

$+12 / -4 = \underline{\quad}$

$+36 / +9 = \underline{\quad}$

$2/5 \times 9 = \underline{\quad}$

$9 \times .02 = \underline{\quad}$

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

$3/4 \times .3 = \underline{\quad}$

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

$.3 \times 1 \frac{3}{4} = \underline{\quad}$

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

$\underline{\quad} \text{ is } 60 \% \text{ of } 30$

$-10 / +5 = \underline{\quad}$

$-24 / -8 = \underline{\quad}$

$8 / 1/3 = \underline{\quad}$

$3 / .6 = \underline{\quad}$

$2 / 1 \frac{2}{5} = \underline{\quad}$

$.2 / 2/5 = \underline{\quad}$

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

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

$\underline{\quad} : .06 = .8 : .03$

$150 \% \text{ of } 20 \text{ is } \underline{\quad}$

Real World Mathematics (5E)

$$+2 + +6 = \underline{+8}$$

$$+3 + -8 = \underline{-5}$$

$$3/4 + 2 = \underline{2\ 3/4}$$

$$.4 + 2 = \underline{2.4}$$

$$2\ 1/4 + 3 = \underline{5\ 1/4}$$

$$.03 + 1/4 = \underline{.28}$$

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

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

$$1/2 : 1/3 = \underline{3/8} : 1/4$$

$$7 \text{ is } \underline{35} \% \text{ of } 20$$

$$-3 + -7 = \underline{-10}$$

$$-2 + +9 = \underline{+7}$$

$$3 - 4/5 = \underline{2\ 1/5}$$

$$2 - .7 = \underline{1.3}$$

$$4 - 1\ 2/3 = \underline{2\ 1/3}$$

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

$$\sqrt{81} - 7^0 = \underline{8}$$

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

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

$$15\% \text{ of } \underline{40} = 6$$

$$+4 + -9 = \underline{-5}$$

$$+5 + +7 = \underline{+12}$$

$$2/3 \times 4 = \underline{2\ 2/3}$$

$$.23 \times 4 = \underline{.92}$$

$$2\ 1/2 \times 5 = 12\ 1/2$$

$$3/4 \times .02 = \underline{.015}$$

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

$$.07 \times 1\ 1/4 = \underline{.0875}$$

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

$$\underline{12} \text{ is } 30\% \text{ of } 40$$

$$-5 + +8 = \underline{+3}$$

$$-4 + -6 = \underline{-10}$$

$$5 \div 1/2 = \underline{10}$$

$$6 \div .8 = \underline{7.5}$$

$$2 \div 1\ 4/5 = \underline{1\ 1/9}$$

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

$$\sqrt{64} \div 5^1 = \underline{1\ 3/5}$$

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

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

$$125\% \text{ of } 12 \text{ is } \underline{15}$$

Real World Mathematics (5F)

$$-5 - +9 = \underline{-14}$$

$$-4 - -7 = \underline{+3}$$

$$3/4 + 7 = \underline{7\ 3/4}$$

$$.04 + 7 = \underline{7.04}$$

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

$$.03 + 1/5 = \underline{.23}$$

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

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

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

$$9 \text{ is } \underline{45} \% \text{ of } 20$$

$$+2 - +7 = \underline{-5}$$

$$+3 - -9 = \underline{+12}$$

$$6 - 1/5 = \underline{5\ 4/5}$$

$$6 - .05 = \underline{5.95}$$

$$5 - 1\ 3/4 = \underline{3\ 1/4}$$

$$.7 - 1/4 = \underline{.45}$$

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

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

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

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

$$-3 - -6 = \underline{+3}$$

$$-2 - +8 = \underline{-10}$$

$$2/3 \times 8 = \underline{5\ 1/3}$$

$$8 \times .03 = \underline{2.4}$$

$$2\ 1/3 \times 5 = \underline{11\ 2/3}$$

$$3/5 \times .03 = \underline{.018}$$

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

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

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

$$\underline{28} \text{ is } 70\% \text{ of } 40$$

$$+4 - -8 = \underline{+12}$$

$$+5 - +6 = \underline{-1}$$

$$9 \div 1/2 = \underline{18}$$

$$9 \div .2 = \underline{45}$$

$$2 \div 1\ 3/5 = \underline{1\ 1/4}$$

$$.04 \div 1/2 = \underline{.08}$$

$$4^3 \div \sqrt{49} = \underline{9\ 1/7}$$

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

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

$$175\% \text{ of } 16 \text{ is } \underline{28}$$

Real World Mathematics (5G)

$$+2 \times +6 = \underline{+12}$$

$$+3 \times -9 = \underline{-27}$$

$$4/5 + 2 = \underline{2\ 4/5}$$

$$.43 + 2 = \underline{2.43}$$

$$2\ 1/2 + 5 = \underline{7\ 1/2}$$

$$.03 + 1/2 = \underline{.53}$$

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

$$.2 + 1\ 3/5 = \underline{1.8}$$

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

$$3 \text{ is } \underline{15} \% \text{ of } 20$$

$$-3 \times -7 = \underline{+21}$$

$$-2 \times +8 = \underline{-16}$$

$$3 - 3/4 = \underline{2\ 1/4}$$

$$3 - .67 = \underline{2.33}$$

$$6 - 1\ 2/5 = \underline{4\ 3/5}$$

$$.6 - 2/5 = \underline{.2}$$

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

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

$$.08 : .6 = .04 : \underline{.3}$$

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

$$+4 \times -8 = \underline{-32}$$

$$+5 \times +7 = \underline{+35}$$

$$2/5 \times 3 = \underline{1\ 1/5}$$

$$.12 \times 4 = \underline{.48}$$

$$2\ 1/4 \times 5 = \underline{11\ 1/4}$$

$$3/5 \times .02 = \underline{.012}$$

$$8^1 \times \sqrt{4} = \underline{16}$$

$$.6 \times 1\ 1/4 = \underline{.75}$$

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

$$\underline{32} \text{ is } 40\% \text{ of } 80$$

$$-5 \times +9 = \underline{-45}$$

$$-4 \times -6 = \underline{+24}$$

$$5 \div 1/3 = \underline{15}$$

$$5 \div .4 = \underline{12.5}$$

$$2 \div 1\ 1/5 = \underline{1\ 2/3}$$

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

$$\sqrt{64} \div 7^1 = \underline{9\ 1/7}$$

$$2\ 3/5 \div .2 = \underline{13}$$

$$\underline{1.2} : .04 = .6 : .02$$

$$250 \% \text{ of } 18 \text{ is } \underline{45}$$

Real World Mathematics (5H)

$$+6 \div +3 = \underline{+2}$$

$$+21 \div -7 = \underline{-3}$$

$$4/5 + 6 = \underline{6 \frac{4}{5}}$$

$$.43 + 6 = \underline{6.43}$$

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

$$.07 + 1/4 = \underline{.32}$$

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

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

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

$$8 \text{ is } \underline{40} \% \text{ of } 20$$

$$-8 \div -2 = \underline{+4}$$

$$-18 \div +6 = \underline{-2}$$

$$7 - 3/4 = \underline{6 \frac{1}{4}}$$

$$7 - .17 = \underline{6.83}$$

$$4 - 1 \frac{5}{6} = \underline{3 \frac{1}{6}}$$

$$.9 - 3/4 = \underline{.15}$$

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

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

$$.9 : .3 = .6 : \underline{.2}$$

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

$$+12 \div -4 = \underline{-3}$$

$$+36 \div +9 = \underline{+4}$$

$$2/5 \times 9 = \underline{3 \frac{3}{5}}$$

$$9 \times .02 = \underline{.18}$$

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

$$3/4 \times .3 = \underline{.225}$$

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

$$.3 \times 1 \frac{3}{4} = \underline{.525}$$

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

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

$$-10 \div +5 = \underline{-2}$$

$$-24 \div -8 = \underline{+3}$$

$$8 \div 1/3 = \underline{24}$$

$$3 \div .6 = \underline{5}$$

$$2 \div 1 \frac{2}{5} = \underline{1 \frac{3}{7}}$$

$$.2 \div 2/5 = \underline{.5}$$

$$2^3 \div \sqrt{36} = \underline{1 \frac{1}{3}}$$

$$2 \frac{4}{5} \div .4 = \underline{7}$$

$$\underline{1.6} : .06 = .8 : .03$$

$$150 \% \text{ of } 20 \text{ is } \underline{30}$$