

Division Strategies with the Random Number CD

The Random Number CD is a powerful tool for all operations of mathematics. The teacher using this tool should not feel limited to what is within this book. To use the Random Number CD for division requires an understanding of the two models of meaning for division. Division means repeated subtraction of like quantity. The other model of division is the fair sharing. The language of division includes divisor, dividend and quotient. Division is the quirky operation because of the possible remainders.

The division strategies are the inverse of the multiplication strategies (keeping in mind the possible remainders):

- Divide by zero
- Divide by one
- Divide by ten
- Divide by two (recognition of doubles)
- Triangular Relationships

The Random Number CD can be used with division. The response board will be a powerful tool for the practice of the division strategies. The teacher can also change any operational symbol on any data sheet to the division symbol with whiteout.

Some other ways to use the Random Number CD for division include:

1. Setting up division equations starting with any number on the response board. Whatever number students hear would be divided into that number. For example:

$$\begin{array}{r} 12 \div \square = \underline{\quad} \\ 13 \div \square = \underline{\quad} \\ 14 \div \square = \underline{\quad} \\ 15 \div \square = \underline{\quad} \end{array}$$

This would be the mental prompt of thinking about division situations with or without remainders.

2. The division connection that is very powerful and was taught to me by Dr. Lola May is the use of the division frame. For example:

$$3 \overline{) \quad \quad}$$

$$6 \overline{) \quad \quad}$$

$$2 \overline{) \quad \quad}$$

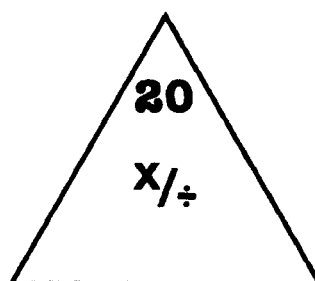
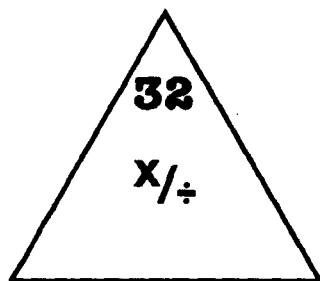
$$5 \overline{) \quad \quad}$$

$$2 \overline{) \quad \quad}$$

$$4 \overline{) \quad \quad}$$

Students would record the dividend.

3. Triangular Relationships can be done with division relationships. The teacher would give students a number for the top angle on the equilateral triangle. The other two angles are blank except for the ear in one angle. Students would record the number heard on the ear and compute the quotient for the two numbers and record that quotient in the remaining triangle. For example:



4. The practice sheets on pages 191 and 207 can be used with division drill command in preparation for remainder analysis. The students would be given a drill command of divide by two. Whatever number is heard will be divided by two. For example:

Name: _____	
Div Command: +2	
5	2 r.1
4	2
2	1
7	3 r. 1

Name: _____	
Div Command: +3	
9	3
4	1 r. 1

Division Strategies

1. $15 \div \square = \underline{\quad}$

11. $15 \div \square = \underline{\quad}$

2. $15 \div \square = \underline{\quad}$

12. $15 \div \square = \underline{\quad}$

3. $15 \div \square = \underline{\quad}$

13. $15 \div \square = \underline{\quad}$

4. $15 \div \square = \underline{\quad}$

14. $15 \div \square = \underline{\quad}$

5. $15 \div \square = \underline{\quad}$

15. $15 \div \square = \underline{\quad}$

6. $15 \div \square = \underline{\quad}$

16. $15 \div \square = \underline{\quad}$

7. $15 \div \square = \underline{\quad}$

17. $15 \div \square = \underline{\quad}$

8. $15 \div \square = \underline{\quad}$

18. $15 \div \square = \underline{\quad}$

9. $15 \div \square = \underline{\quad}$

19. $15 \div \square = \underline{\quad}$

10. $15 \div \square = \underline{\quad}$

20. $15 \div \square = \underline{\quad}$

Division Strategies

$1. 14 \div \square = \underline{\quad}$

$11. 14 \div \square = \underline{\quad}$

$2. 14 \div \square = \underline{\quad}$

$12. 14 \div \square = \underline{\quad}$

$3. 14 \div \square = \underline{\quad}$

$13. 14 \div \square = \underline{\quad}$

$4. 14 \div \square = \underline{\quad}$

$14. 14 \div \square = \underline{\quad}$

$5. 14 \div \square = \underline{\quad}$

$15. 14 \div \square = \underline{\quad}$

$6. 14 \div \square = \underline{\quad}$

$16. 14 \div \square = \underline{\quad}$

$7. 14 \div \square = \underline{\quad}$

$17. 14 \div \square = \underline{\quad}$

$8. 14 \div \square = \underline{\quad}$

$18. 14 \div \square = \underline{\quad}$

$9. 14 \div \square = \underline{\quad}$

$19. 14 \div \square = \underline{\quad}$

$10. 14 \div \square = \underline{\quad}$

$20. 14 \div \square = \underline{\quad}$

Division Strategies

$1. 13 \div \square = \underline{\quad}$

$11. 13 \div \square = \underline{\quad}$

$2. 13 \div \square = \underline{\quad}$

$12. 13 \div \square = \underline{\quad}$

$3. 13 \div \square = \underline{\quad}$

$13. 13 \div \square = \underline{\quad}$

$4. 13 \div \square = \underline{\quad}$

$14. 13 \div \square = \underline{\quad}$

$5. 13 \div \square = \underline{\quad}$

$15. 13 \div \square = \underline{\quad}$

$6. 13 \div \square = \underline{\quad}$

$16. 13 \div \square = \underline{\quad}$

$7. 13 \div \square = \underline{\quad}$

$17. 13 \div \square = \underline{\quad}$

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$9. 13 \div \square = \underline{\quad}$

$19. 13 \div \square = \underline{\quad}$

$10. 13 \div \square = \underline{\quad}$

$20. 13 \div \square = \underline{\quad}$

Division Strategies

1. $12 \div \square = \underline{\quad}$

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14. $12 \div \square = \underline{\quad}$

5. $12 \div \square = \underline{\quad}$

15. $12 \div \square = \underline{\quad}$

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10. $12 \div \square = \underline{\quad}$

20. $12 \div \square = \underline{\quad}$