

## Lesson 4b: Estimate Quotients

**Objective:** Use compatible numbers and place value to divide.

Complete on a separate sheet of paper and turn in to the basket.

**Warm-up:** Divide mentally.

1.  $48 \div 8 =$

2.  $49 \div 7 =$

3.  $28 \div 4 =$

4.  $27 \div 3 =$

Estimate the quotient.

5.  $6 \overline{)356}$

6.  $8 \overline{)331,516}$

7.  $5,079 \div 7$

8.  $613,480 \div 9 =$

**Vocabulary:**

1. Compatible Numbers – Numbers that close to the original numbers and are easy to divide.
2. Divisor – the number by which a number is being divided.
3. Dividend – the number that is divided in a division problem.
4. Quotient – the result in division
5. Remainder – the number that is left over after one whole number is divided by another.

Learn about it:

Example:  $378 \div 4$

$$\begin{array}{r} \text{? hundreds} \\ 4 \overline{)378} \end{array}$$

- $3 < 4$  there is not enough hundreds to divide  $378 \div 4 < 100$
- $37 > 4$  Place the first digit in the tens place

$$\begin{array}{r} 9 \\ 4 \overline{)378} \\ -36 \\ \hline 1 \end{array}$$

Divide the tens.

- Multiply  $9 \times 4$
- Subtract  $37 - 36$
- Compare  $1 < 4$

$$\begin{array}{r} 94 \text{ R } 2 \\ 4 \overline{)378} \\ -36 \downarrow \\ \hline 18 \\ -16 \\ \hline 2 \end{array}$$

Bring down the ones. Divide the ones.  
Write the remainder

- Bring down the 8 ones.
- Multiply  $4 \times 4$
- Subtract  $18 - 16$
- Compare  $2 < 4$
- The remainder is 2

**Mnemonic Device:**

**Dad (Divide), Mother (Multiply), Sister (Subtract) , Brother (Bring Down)**

**Practice:** Complete in your journal

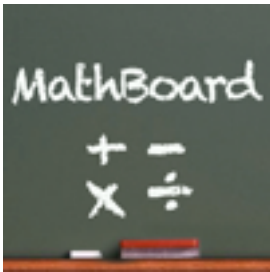
$$6 \overline{)582}$$

$$8 \overline{)9,814}$$

$$5 \overline{)4,217}$$

$$4 \overline{)2,616}$$

**App on the iPad:**



**Homework: One-digit divisors (4.2)**