

now ao you know :

a) 90 b) 134 c) 395 d) 1724 e) 30 f) 560 g) 3015 h) 74 i) 748

- 2. Write a 5-digit number that is divisible by 8. How did you choose the number?
- A number is missing the tens digit.
 The number is 51 3□6.
 What could the tens digit be if the number is divisible by 2? By 4? By 8?
- 4. Which numbers are divisible by 4? By 8? By 10? How do you know?

a) 80

b) 216

c) 132

d) 350 e) 2160

0 **f)** 2092

- 5. Andrew and Matthew discuss divisibility.

 Andrew says, "280 is divisible by 5 and by 8. $5 \times 8 = 40$, so 280 is also divisible by 40."

 Matthew says, "296 is divisible by 4 and by 8. $4 \times 8 = 32$, so 296 is also divisible by 32."

 Are both Andrew and Matthew correct?

 Explain your thinking.
- 6. Explain why a number with 0 in the ones place is divisible by 5

Pass in to me

7. Use the digits 0 to 9. Replace the \square in each number to make a number divisible by 4. Find as many answers as you can.

a) 822□

b) 211 4□8

c) 15 □32

8. Take It Further A leap year occurs every 4 years.

The years 1992 and 2004 were leap years.

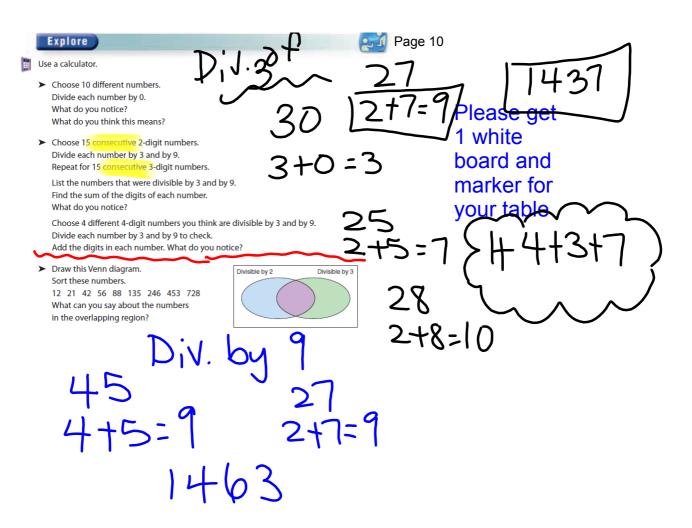
What do you notice about these numbers?

Was 1964 a leap year? 1852? 1788? Explain. 4

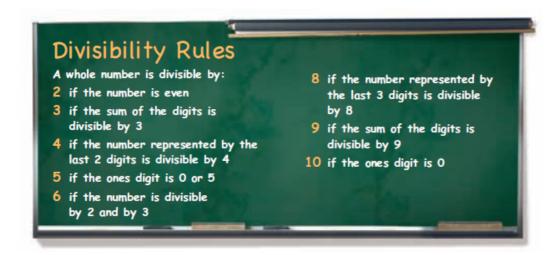
7.a) 8220 8228

- They all end in 428 248 in multiples

211 408



6+6+6+5=27 7+7+3+6=18 2+1+7+5=18 18+14=36 18+14=3618+14=36



Divisibility for 9

The sum of the digits are divisible by 9 (9 cango in to the sum).

ex. 27=2+7=9

7.12 gues.1 P.13 gues.8

Practice

1. Which numbers are divisible by 3? By 9? How do you know?

a) 117

- b) 216
- c) 4125d) 726
- e) 8217
- f) 12 024

8. Use the digits 0 to 9.

Replace the \square in each number to make a number divisible by 3.

Find as many answers as you can.

- a) 4□6
- **b)** 1□32
- c) 2471