DIVISION – DAY 3
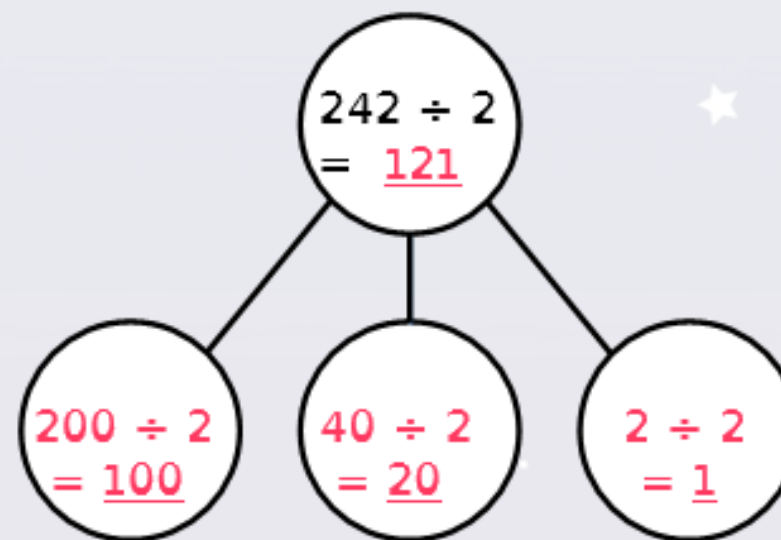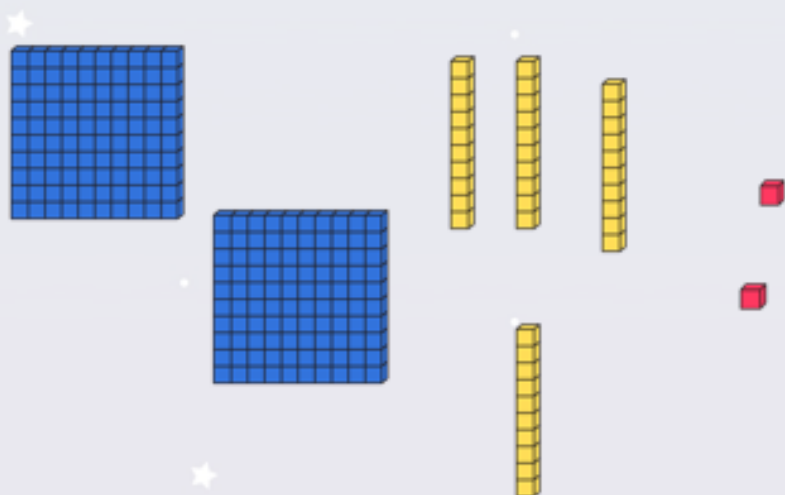
L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

FLUENCY

Talking Time:

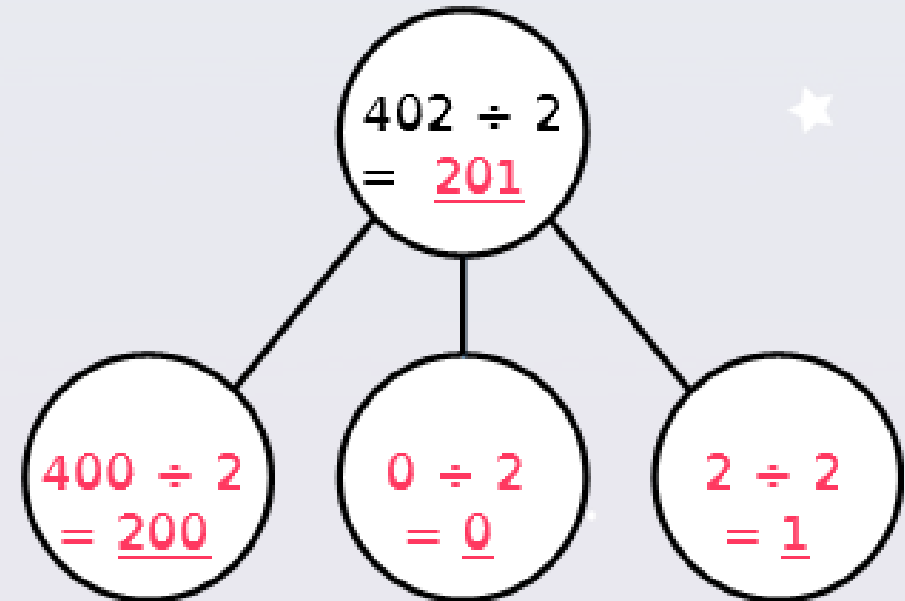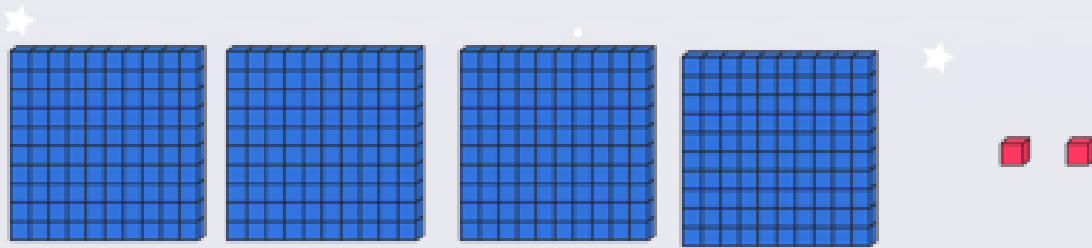Jamal is using Base 10 pieces to divide 242 by 2.

242 ÷ 2 = 121

200 ÷ 2 = 100

40 ÷ 2 = 20

2 ÷ 2 = 1

FLUENCY

Jamal is using Base 10 pieces to divide 402 by 2.

402 ÷ 2 = 201

400 ÷ 2 = 200

0 ÷ 2 = 0

2 ÷ 2 = 1

FLUENCY

Jamal is using Base 10 pieces to divide 360 by 3.
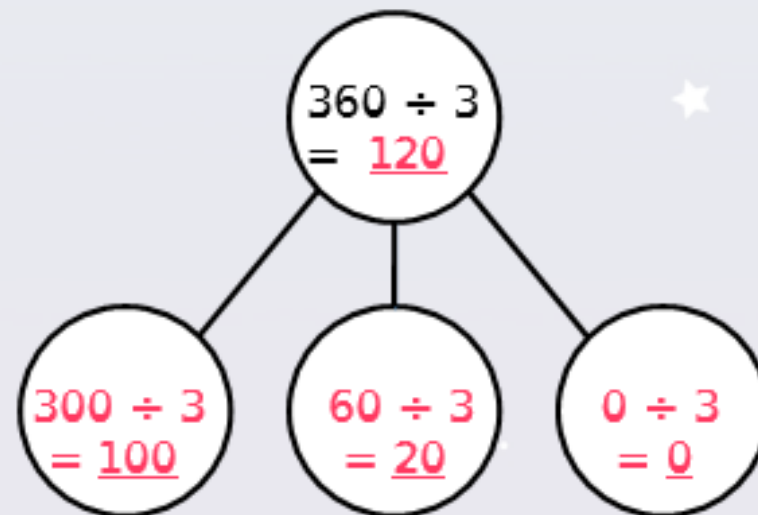
$360 \div 3 = \underline{120}$

$300 \div 3 = \underline{100}$

$60 \div 3 = \underline{20}$

$0 \div 3 = \underline{0}$

FLUENCY

Talking Time:

Yasmin is using place value counters to divide 306 by 3.

hundreds	tens	ones

FLUENCY

Yasmin is using place value counters to divide 306 by 3.

hundreds	tens	ones

$306 \div 3 = 102$

$300 \div 3 = 100$

$0 \div 3 = 0$

$6 \div 3 = 2$

FLUENCY

Yasmin is using place value counters to divide 480 by 4.

hundreds	tens	ones

FLUENCY

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

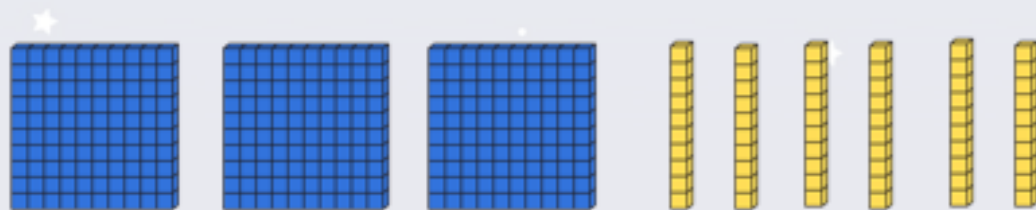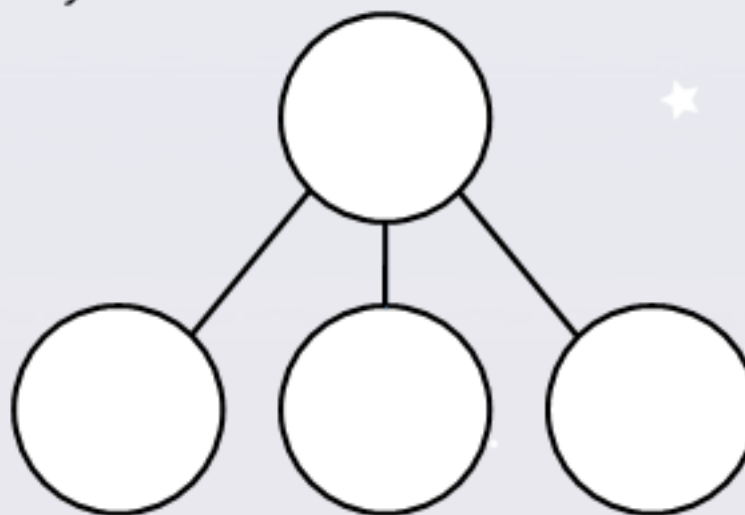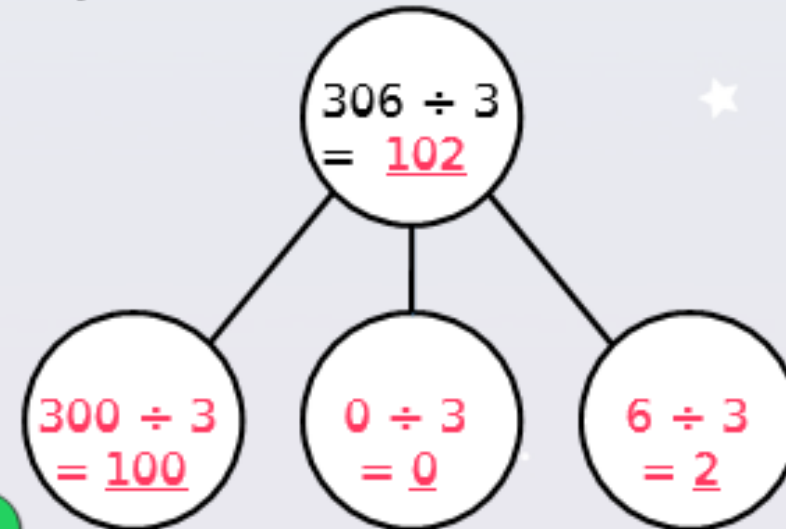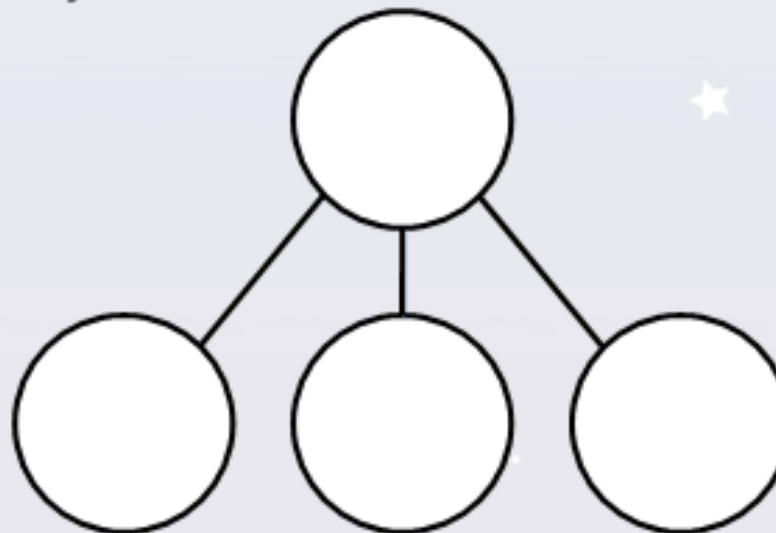Yasmin is using place value counters to divide 480 by 4.

hundreds	tens	ones

$480 \div 4 = 120$

$400 \div 4 = 100$

$80 \div 4 = 20$

$0 \div 4 = 0$

FLUENCY

Use Yasmin's strategy to calculate:

a) 603 ÷ 3 =

b) 960 ÷ 3 =

c) 408 ÷ 4 =

d) 660 ÷ 6 =

e) 848 ÷ 4 =

hundreds	tens	ones
●	● ●	
●	● ●	
●	● ●	
●	● ●	
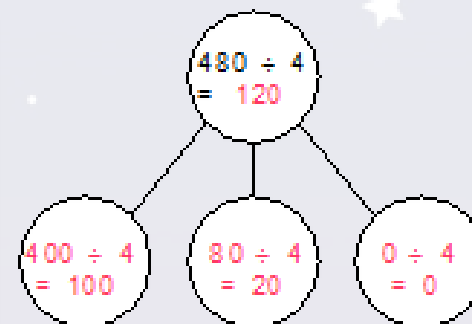
480 ÷ 4 = 120

400 ÷ 4 = 100

80 ÷ 4 = 20

0 ÷ 4 = 0

FLUENCY

Use Yasmin's strategy to calculate:

a) 603 ÷ 3 = <u>201</u>

b) 960 ÷ 3 = <u>320</u>

c) 408 ÷ 4 = <u>102</u>

d) 660 ÷ 6 = <u>110</u>

e) 848 ÷ 4 = <u>212</u>

hundreds	tens	ones
●	● ●	
●	● ●	
●	● ●	
●	● ●	

480 ÷ 4 = 120

400 ÷ 4 = 100

80 ÷ 4 = 20
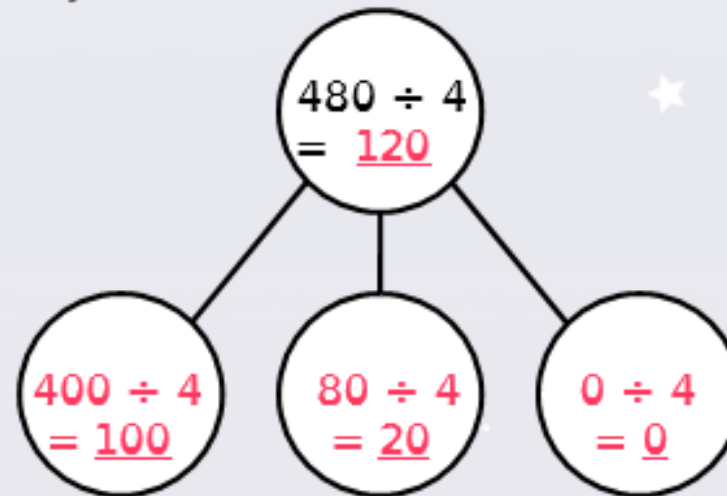
0 ÷ 4 = 0

FLUENCY

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

Partition 377 in many ways to divide it by 3.

hundreds	tens	ones
100	10 10	1 1 1 1 1
100	10 10	1 1 1 1 1
100	10 10	1 1 1 1 1
		1 1

$377 \div 3 = 125 \text{ r.2}$

$300 \div 3 = 100$

$60 \div 3 = 20$

$17 \div 3 = 5 \text{ r.2}$

FLUENCY

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

Partition 377 in many ways to divide it by 3.

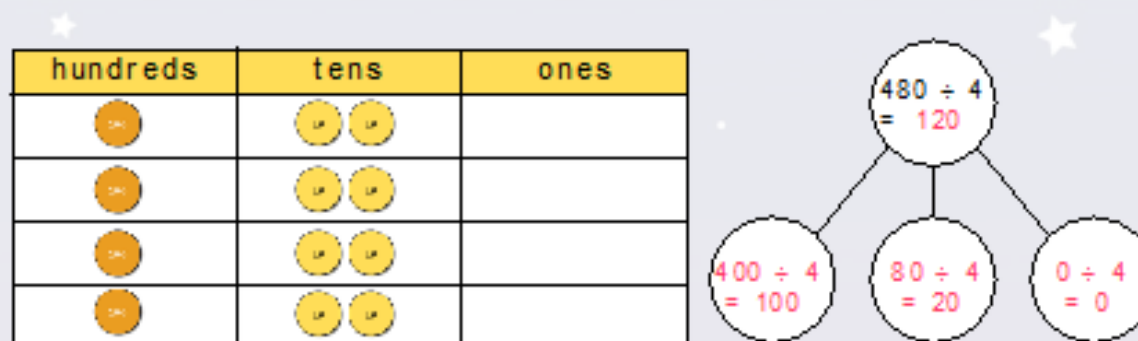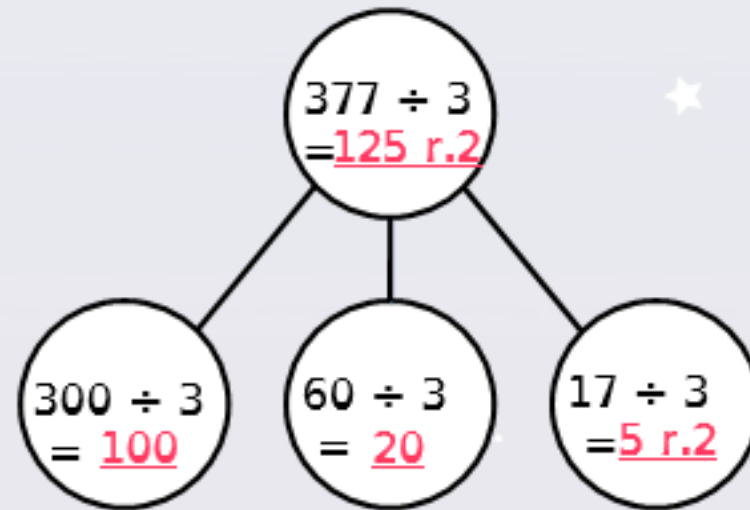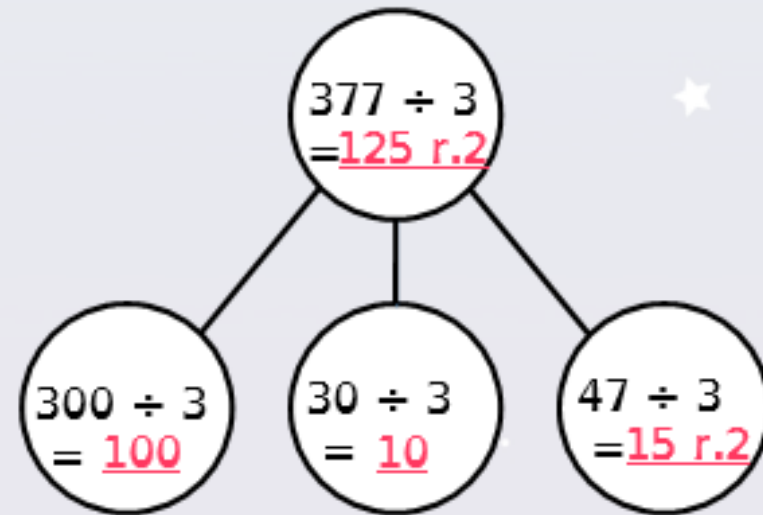| hundreds	tens	ones
100	10 10	1 1 1 1 1
100	10 10	1 1 1 1 1
100	10 10	1 1 1 1 1

1 1

$377 \div 3 = 125\ r.2$

$300 \div 3 = 100$

$30 \div 3 = 10$

$47 \div 3 = 15\ r.2$

FLUENCY

Partition the following numbers in many ways to solve:

a) $352 \div 3$

b) $764 \div 3$

c) $734 \div 6$

d) $854 \div 6$

e) $857 \div 7$

hundreds	tens	ones
●	● ●	●
●	● ●	●
●	● ●	●
●	● ●	●
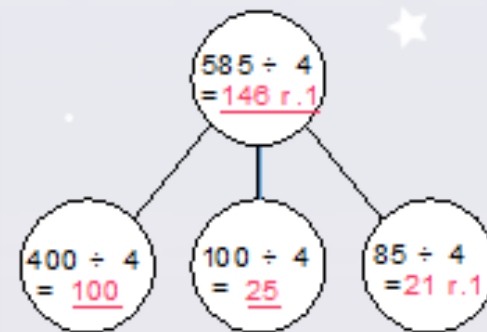
$585 \div 4 = 146$ r.1

$400 \div 4 = 100$

$100 \div 4 = 25$

$85 \div 4 = 21$ r.1

FLUENCY

Partition the following numbers in many ways to solve:

a) $352 \div 3 =$ 117 r.1

b) $764 \div 3 =$ 254 r.2

c) $734 \div 6 =$ 122 r.2

d) $854 \div 6 =$ 142 r.2

e) $857 \div 7 =$ 122 r.3

hundreds	tens	ones
●	● ●	●
●	● ●	● ●
●	● ●	● ● ●
●	● ●	●
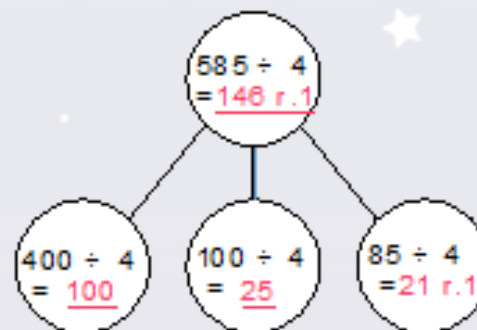
●

$585 \div 4$
$= 146$ r.1

$400 \div 4$
$= 100$

$100 \div 4$
$= 25$

$85 \div 4$
$= 21$ r.1

PROBLEM SOLVING

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

Use part-whole models to help you solve the word problems below:

a) A bakery produces 367 muffins per day.
   They place 3 muffins in a box.
   How many boxes do they use each day?
   Are there any muffins left over at the end of the day?

b) A farmer picked 637 pears last week.
   She placed them in boxes with 6 pears in each box.
   How many boxes did she fill?
   Did she have any pears left over?

PROBLEM SOLVING

Use part-whole models to help you solve the word problems below:

a) A bakery produces 367 muffins per day.
   They place 3 muffins in a box.
   How many boxes do they use each day?
   Are there any muffins left over at the end of the day?
   367 ÷ 3 = 122 r.1, so 122 boxes are used with one muffin left over!

b) A farmer picked 637 pears last week.
   She placed them in boxes with 6 pears in each box.
   How many boxes did she fill?
   Did she have any pears left over?
   637 ÷ 6 = 106 r.1, so 106 boxes are filled with one pear left over!

PROBLEM SOLVING

Use part-whole models to help you solve the word problems below:

a) A bakery produces 698 cookies per day.
   They place 3 cookies in a bag.
   How many bags do they use each day?
   Are there any cookies left over at the end of the day?

b) A farmer picked 755 apples last week.
   She placed them in boxes with 6 apples in each box.
   How many boxes did she fill?
   Did she have any apples left over?

PROBLEM SOLVING

Use part-whole models to help you solve the word problems below:

a) A bakery produces 698 cookies per day.
They place 3 cookies in a bag.
How many bags do they use each day?
Are there any cookies left over at the end of the day?
698 ÷ 3 = 232 r.2, so 132 bags are used with two cookies left over!

b) A farmer picked 755 apples last week.
She placed them in boxes with 6 apples in each box.
How many boxes did she fill?
Did she have any apples left over?
755 ÷ 6 = 125 r.5, so 125 boxes are filled with five apples left over!

PROBLEM SOLVING

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

Using 15 counters and a place value chart, create:

a) a three-digit number that can be divided by 2;

b) a three-digit number than can be divided by 4;

c) a three-digit number that can be divided by 3;

d) a three digit number that can be divided by 5.

Extension: Create three-digit numbers that are divisible by 6, 7, 8 and 9...

hundreds	tens	ones

PROBLEM SOLVING

L.O. I can use mathematical equipment to support my understanding of dividing 3-digit numbers by 1-digit numbers

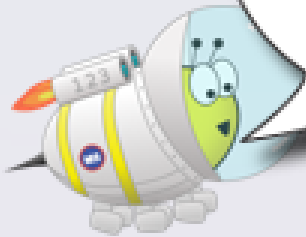Using 15 counters and a place value chart, create:

a) a three-digit number that can be divided by 2;
For example, 762, 870...

b) a three-digit number than can be divided by 4;
For example, 744, 780...

c) a three-digit number that can be divided by 3;
For example, 366, 393...

d) a three digit number that can be divided by 5.
For example, 555, 780, 870...

hundreds	tens	ones

REASONING

Evaluation:

An even three-digit number divided by an odd number will require a remainder.

Is Astrobee's statement always, sometimes or never true?

Explain your answer.

REASONING

Evaluation:

An even three-digit number divided by an odd number will require a remainder.

Astrobee's statement is only sometimes true. For example, 606 ÷ 3 = 202, so an even three-digit number divided by an odd number that <u>does not</u> require a remainder. However, 554 ÷ 5 = 110 r.4, so an even three-digit number divided by an odd number that <u>does</u> require a remainder.