

Using multiples to divide

Worksheet

Mr Ward



Warm up - Speedy multiples

Try timing yourself!



Example:

double

double again

double again

x 1	17
x 2	34
x 4	68
x 8	136
x 10	170

x 1	15
x 2	
x 4	
x 8	
x 10	

x 1	24
x 2	
x 4	
x 8	
x 10	

x 1	32
x 2	
x 4	
x 8	
x 10	

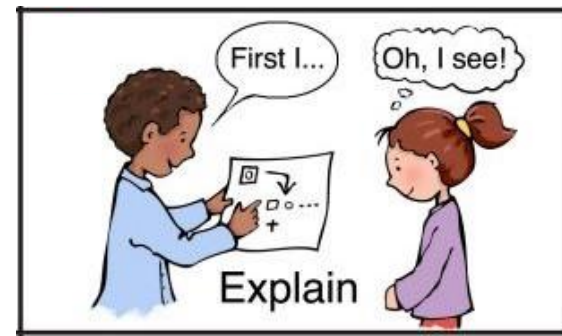
x 1	45
x 2	
x 4	
x 8	
x 10	



Talk Task - Using multiples to divide

Represent each problem with an area model and then partition and calculate each part.

Record the steps of the strategy on an empty number line



There are six athletes in each race and 252 athletes competed in total. How many races were there?

There are nine swimmers in each race and 162 swimmers competed in total. How many races were there?



There are 60 athletes on each floor of an apartment block. There are 1920 athletes in the whole block, how many floors are there?



Independent Task - Hunt for multiples



1. Hunt out the multiples of 15, 24, 32 or 45.
2. Use the multiples grids from the Do Now task.
3. Sort the numbers and generate statements.

672

930

1035

Sentence Stems

1890

792

448



___ is divisible by ___ because

___ is a factor of ___ because

___ is a multiple of ___ because

576

288

900



X 1	15
X 2	30
X 3	45
X 4	60
X 5	75
X 6	90
X 7	105
X 8	120
X 9	135
X10	150

X 1	24
X 2	48
X 3	72
X 4	96
X 5	120
X 6	144
X 7	168
X 8	192
X 9	216
X 10	240

X 1	32
X 2	64
X 3	96
X 4	128
X 5	160
X 6	192
X 7	224
X 8	256
X 9	288
X 10	320

X 1	45
X 2	90
X 3	135
X 4	180
X 5	225
X 6	270
X 7	315
X 8	360
X 9	405
x 10	450



Challenge Slide

Look at the example statements generated using the facts found within the tables.

What other numbers can you generate statements about?



x 1	15	150
x 2	30	300
x 3	45	450
x 4	60	600
x 5	75	750
x 6	90	900
x 7	105	1050
x 8	120	1200
x 9	135	1350
x 10	150	1500

$$930 \div 15 = 62$$

x 1	24	240
x 2	48	480
x 3	72	720
x 4	96	960
x 5	120	1200
x 6	144	1440
x 7	168	1680
x 8	192	1920
x 9	216	2160
x 10	240	2400

$$792 \div 24 = 33$$

x 1	32	320
x 2	64	640
x 3	96	960
x 4	128	1280
x 5	160	1600
x 6	192	1920
x 7	224	2240
x 8	256	2560
x 9	288	2880
x 10	320	3200

$$672 \div 32 = 21$$

x 1	45	450
x 2	90	900
x 3	135	1350
x 4	180	1800
x 5	225	2250
x 6	270	2700
x 7	315	3150
x 8	360	3600
x 9	405	4050
x 10	450	4500

$$1890 \div 45 = 42$$

