

## HELPING AT HOME MULTIPLICATION 2



## Multiplying by multiples of 10, 100 and 1000

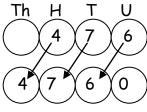


To multiply by 10 you move every digit *one* place to the left.

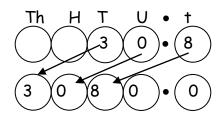
To multiply by **100** you move every digit *two* places to the left.

To multiply by 1000 you move every digit *three* places to the left.

**Example 1** (a) Multiply 476 by 10 (b) Multiply 30.8 by 100



476 x 10 = 4760



 $30.8 \times 100 = 3080$ 

(c)  $35 \times 30$ 

To multiply by 30, multiply by 3, then by 10.

 $35 \times 3 = 105$  $105 \times 10 = 1050$ 

so 35 x 30 = 1050

(d) 436 x 600

To multiply by 600, multiply by 6, then by 100.

436 x 6 = 2616 2616 x 100 = 261600

so 436 x 600 = 261600



We may also use these rules for multiplying decimal numbers.

Example 2

(a)  $2.36 \times 20$ 

(b)  $38.4 \times 50$ 

 $2.36 \times 2 = 4.72$ 

 $38.4 \times 5 = 192.0$ 

 $4.72 \times 10 = 47.2$ 

192.0x 10 = 1920

so  $2.36 \times 20 = 47.2$ 

so  $38.4 \times 50 = 1920$