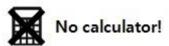
#### **Powers of 10 Homework**



# **Literacy**

10<sup>2</sup> means "ten to the power 2" (Also known as "ten squared": 100)

 $10^3$  means "ten to the power 3"

(Also known as "ten cubed": 1000)

## Research

1000 metres = 1 kilometre 1000 millimetres = 1 metre  $1000 __metres = 1 millimetre$   $1000 __metres = 1 __metre$ 

# **Memory**

Learn these rules:

- $\times$  10 and  $\div$  0.1 mean the same: Scale up to 10 times the size
- $\times$  0.1 and  $\div$  10 mean the same: Scale down to  $\frac{1}{10}$  of the size

### **Skills**

Work out the answers to:

a) 
$$15.2 \times 10 =$$

b) 
$$22.4 \times 100 =$$

c) 
$$1303 \div 100 =$$

d) 
$$230.244 \div 100 =$$

e) 
$$10.143 \times 0.1 =$$

f) 
$$3.142 \times 0.01 =$$

g) 
$$14.2 \div 0.1 =$$

h) 
$$0.03 \div 0.001 =$$

### **Stretch**

Find the value of:

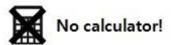
a) 
$$13.4 \times 10^3 =$$

b) 
$$0.34 \times 10^7 =$$

$$12.12 \div 10^4 =$$

$$13 \times 10^{-2} =$$

#### Powers of 10 Homework SOLUTIONS



# **Literacy**

10<sup>2</sup> means "ten to the power 2" (Also known as "ten squared": 100)

10<sup>3</sup> means "ten to the power 3" (Also known as "ten cubed": 1000)

## Research

1000 metres = 1 kilometre 1000 millimetres = 1 metre 1000 micrometres = 1 millimetre 1000 nanometres = 1 micrometre

 $1000 \, picometres = 1 \, nanometre$ 

# **Memory**

Learn these rules:

- $\times$  10 and  $\div$  0.1 mean the same: Scale up to 10 times the size
- $\times$  0.1 and  $\div$  10 mean the same: Scale down to  $\frac{1}{10}$  of the size

### Skills

Work out the answers to:

i) 
$$15.2 \times 10 = 152$$

j) 
$$22.4 \times 100 = 2240$$

k) 
$$1303 \div 100 = 13.03$$

$$1) \quad 230.244 \div 100 = 2.30244$$

m) 
$$10.143 \times 0.1 = 1.0143$$

n) 
$$3.142 \times 0.01 = 0.03142$$

o) 
$$14.2 \div 0.1 = 142$$

p) 
$$0.03 \div 0.001 = 30$$

### **Stretch**

Find the value of:

$$e) \quad 13.4 \times 10^3 = 13400$$

$$0.34 \times 10^7 = 3400000$$

g) 
$$12.12 \div 10^4 = 0.001212$$

h) 
$$13 \times 10^{-2} = 0.13$$