Comparing numbers to 100 000 000

Year 6

1 Place these numbers in ascending order.

25 780 065, 26 075 056, 25 870 650, 25 575 605

_____

2 Place these numbers in descending order.

69 093 259, 66 093 258, 69 930 258, 66 250 903

_____

3 Add the numbers which belong on this number line

40 125 000, 43 250 025, 49 309 874, 55 093 874, 46 355 000

4 If rounding to the nearest 5 million, circle the numbers which round to fifty million.

48 092 300, 44 092 300, 49 509 874, 49 093 874, 55 355 000 _____

5 Use the relationship signs =, <, > to make the following expressions correct.

a 16 860 125 _____ 18 860 125

b 22 879 012 _____ 22 789 012

c 2 064 777 _____ 2 000 000 + 60 000 + 4 000 + 700 + 70 + 7

d 95 660 100 _____ ninety five and a half million

e eighteen million, two hundred and thirty thousand, four hundred and two _____ 18 230 402

f 1 007 700 _____ 10 700 077

6 Complete these expanded numbers.

a 35 600 050 = 30 000 000 + _____ + _____ + 50

b 12 750 200 = 10^7 × 1 + 2 000 000 + _____ + _____ + _____

c 3 765 809 = 3 × 10^6 + _____ + _____ + 5 000 + _____ + _____

d 94 000 575 = _____ + _____ + 500 + 70 + 5

7 Tick the ones which have an answer in the tens of millions.

a How many km between Venus and Earth?

b How many seconds in a day?

c How many slices of bread do I eat in a year?

d How many times does my heart beat in a year?

e How many people in the United Kingdom?

f How many kilometres to the Sun?

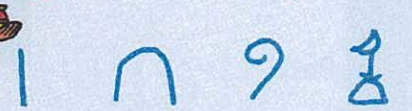
Challenge! Find distances to the Sun and other planets by using Internet sites or an encyclopaedia. Remember to find answers in kilometres, not miles.

Earth to Venus _____ Earth to Mercury _____ Earth to Sun _____

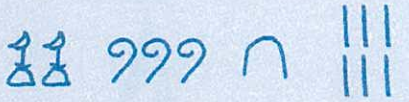
Number systems

Year 6

Egyptian Number System



1 10 100 1000



2 3 1 6

= 2 316

Babylonian Number System

60 10 1

(2 × 60) (3 × 10) (3)

= 153

Hindu-Arabic Number System

Digits 0 – 9

They are used in a place value system – ones, tens, hundreds, thousands, ten thousands, hundred thousands, millions etc.

3 654

Roman Number System

I = I 2 = II 3 = III

5 = V 10 = X

50 = L 40 = XL

100 = C 500 = D

1 000 = M

MM	DCC	LX	IV
2 000	700	60	4

= 2 764

1 From which two ancient countries did the Hindu-Arabic digits originate?

_____ _____

2 Complete the following table.

Hindu-Arabic	Babylonian	Egyptian	Roman
a 3			
b 7			
c 15			
d 48			
e 135			
f 350			

3 Why would the Egyptian, Roman or Babylonian Systems be of little use to us today?

_____

_____

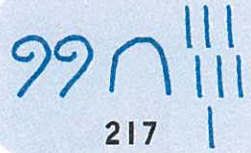
4 What digit does the Hindu-Arabic system have, that other systems don't have? _____

VELS: NUMBER CSF II **Reasoning 4.1, 4.3** • Uses mathematical models. • Makes and tests simple conjectures.

Number facts review

Year 6

1 Record the next three Ancient Egyptian numbers.



2 Count by tens in Roman numerals.

a XXIV, XXXIV, _____, _____, _____, _____.

b CXLVIII, _____, _____, _____, _____.

c MCMXCII, _____, _____, _____, _____.

3 Count on by fives in the Babylonian system.

4 Use the Hindu-Arabic system.

a ÷ 9: 135 _____, 108 _____, 198 _____, 279 _____

b + 23: 93 _____, 77 _____, 86 _____, 52 _____

c − 16: 84 _____, 36 _____, 102 _____, 96 _____

d × 7: 15 _____, 21 _____, 13 _____, 25 _____

5 Remember the short methods in Hindu-Arabic.

÷ 10

a 450 _____
b 3570 _____
c 46 _____
d 189 _____
e 1300 _____

× 5

f 16 _____
g 80 _____
h 32 _____
i 125 _____
j 360 _____

+ 3, × 6

k 8 _____
l 11 _____
m 9 _____
n 12 _____
o 0 _____

group easy numbers

p 12 + 26 + 8 = _____
q 25 + 84 + 15 = _____
r 95 + 13 + 5 + 17 = _____
s 160 + 38 + 2 = _____
t 57 + 320 + 80 = _____

6 Using the number **1 357 008**:

a add 20 000. _____ b subtract 300. _____ c add 130. _____

d divide by 3. _____ e divide by 6. _____ f divide by 2. _____

g multiply by 5. _____ h subtract 300 000. _____

7 a 300 × 40 = _____ b 600 × 30 = _____ c 150 × 300 = _____

d 700 × 60 × 0 = _____ e 50 × 9 × 200 = _____ f 11 × 40 × 5 = _____