GENMATHS RESOURCES

FACTORS, MULTIPLES, PRIMES

1) List all the factors of 14.
   1, 2, 7, 14

2) List all the factors of 36.
   1, 2, 3, 4, 6, 9, 12, 18, 36

3) List all the factors of 12.
   1, 2, 3, 4, 6, 12

4) List all the factors of 100.
   1, 2, 4, 5, 10, 20, 25, 50, 100

5) List all the multiples of 7 up to 50.
   7, 14, 21, 28, 35, 42, 49

6) A list of numbers is shown below
   1 2 3 4 5 6 7 8 9 10
   From this list, state:
   a. The multiples of 3 3, 6, 9
   b. The factors of 2 1, 2
   c. The square numbers 1, 4, 9

7) A list of numbers is shown below
   60 61 62 63 64 65 66 67 68
   From this list, state:
   a. The multiples of 4 60, 64, 68
   b. The multiple of 11 66
   c. The factor of 120 60

8) Is 29 a prime number? Why or why not?
   Yes. It only has two factors, 1 and 29.

9) State all the factors of 24.
   1, 2, 3, 4, 6, 8, 12, 24

10) What is the smallest prime number?
    2

11) Write the first 6 multiples of 5.
    5, 10, 15, 20, 25, 30

12) Which numbers between 1 and 20 are prime?
    2, 3, 5, 7, 11, 13, 17, 19

13) A number is divisible by 3, if the sum of its digits is divisible by 3. State whether the following numbers are divisible by 3.
    a. 315 3 + 1 + 5 = 9 Yes
    b. 476 4 + 7 + 6 = 17 No
    c. 789 7 + 8 + 9 = 24 Yes
    d. 1005 1 + 0 + 0 + 5 = 6 Yes

14) What is the 8th multiple of 3?
    24

15) State the first eight multiples of 12.
    12, 24, 36, 48, 60, 72, 84, 96

16) What is the largest prime number less than 30?
    29

17) Write the first 10 multiples of 4.
    4, 8, 12, 16, 20, 24, 28, 32, 36, 40

18) What is the next multiple of 9 after 45?
    54

19) Is 63 a prime number? If not, list its factors.
    No – 1, 3, 7, 9, 21, 63

20) A number is divisible by 4, if it is divisible by 2, twice. State whether the following numbers are divisible by 4.
    a. 100 100 ÷ 2 = 50 50 ÷ 2 = 25 Yes
    b. 30 30 ÷ 2 = 15 15 ÷ 2 = 7.5 No
    c. 60 60 ÷ 2 = 30 30 ÷ 2 = 15 Yes
    d. 90 90 ÷ 2 = 45 45 ÷ 2 = 22.5 No
    e. 78 78 ÷ 2 = 39 39 ÷ 2 = 19.5 No

21) What is the smallest multiple of 12 that is greater than 100?

108

22) Bob says that all numbers have an even number of factors. Is Bob correct? Why or why not?

No, some numbers have repeated factors such as square numbers.

Factors of 25: 1, 5, 25 (Because 5 × 5 = 25)

23) Which of the follow numbers does not belong?

3 15 18 20 21 24 33

20, it is not a multiple of 3.

24) List all the prime numbers between 50 and 100.

53, 59, 61, 67, 71, 73, 79, 83, 89, 97