GENMATHS RESOURCES

Task 1

1) Work out the value of 3^2.
9

2) Work out the value of 5^2.
25

3) Work out the value of 10^2.
100

4) Work out the value of $\sqrt{16}$.
4

5) Work out the value of $\sqrt{49}$.
7

6) Work out the value of 2^3.
8

7) Work out the value of 4^3.
64

8) Work out the value of $\sqrt[3]{27}$.
3

9) Work out the value of $\sqrt[3]{125}$.
5

10) Work out the value of 12^2.
144

11) Work out the value of 5^3.
125

12) Work out the value of $\sqrt{81}$.
9

13) Work out the value of $\sqrt[3]{64}$.
4

14) Work out the value of 15^2.
225

15) Work out the value of 6^3.
216

16) Work out the value of $\sqrt{121}$.
11

17) Work out the value of $\sqrt[3]{1000}$.
10

18) Work out the value of 20^2.
400

19) Work out the value of 10^3.
1000

20) Work out the value of $\sqrt{196}$.
14

Task 2

21) Write 4 × 4 × 4 as a single power of 4.
4^3

22) Write 2 × 2 × 2 × 2 × 2 as a single power of 2.
2^5

23) A list of numbers is shown below.

5   7   9   11   13   15

Which of the numbers is a square number?
9

24) A list of numbers is shown below.

2   4   6   8   10   12

Which of the numbers are powers of 2?
2, 4, 8

25) A square garden has an area of 81 m². What is the length of one side?
$\sqrt{81} = 9\,m$

26) A cube-shaped box has a volume of 27 cm³. What is the length of one edge?
$\sqrt[3]{27} = 3\,cm$

27) Jack has 100 square tiles. He wants to arrange them in a square. How many tiles will be on each side?
$\sqrt{100} = 10\,squares$

28) A square picture frame has sides that are 12 inches long. What is its area?
$12^2 = 144\,in^2$

29) A square has an area of 36 cm². What is the perimeter of the square?
$\sqrt{36} = 6$
$6 \times 4 = 24\,cm$

30) A poster is in the shape of a square and has an area of 225 cm². What is the side length?
$\sqrt{225} = 15\,cm$

31) The square of a number is 256. What is the number?
$\sqrt{256} = 16$

32) A square window has a perimeter of 36 inches. What is the area?
$Each\ side = 36 \div 4 = 9$
$Area = 9^2 = 81\,in^2$