Year 6 Class 18 questions

Q1

20 students are in a class. 14 play football, 10 play cricket and 2 students don't play either sport.

How many play both sports? ☐ 6

How many play cricket only? ☐ 4

Q2

24 students are in a class. 14 play rugby, 11 play cricket and 5 students don't play either sport.

How many play both sports? ☐ 6

How many play rugby only? ☐ 8

Q3

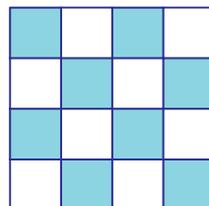How many even numbers are there between 51 and 61?

☐
5

Q4

How many even numbers are there between 21 and 53?

☐
16

Q5

How many squares (of any size) can be found on this square grid?

Grid size	No.of squares
1 × 1	1
2 × 2	5
3 × 3	14
4 × 4	☐ 30

No. of squares = ☐ 30

Q6

Mitchell is 5 years older than Alyssa. If Mitchell is 31 years old, how old is Alyssa?

☐ 26

Q7

A square has an area of 81 cm². What is its perimeter?

☐ cm 36

Q8

A square has an area of 100 cm². What is its perimeter?

☐ cm 40

Q9

A square has an area of 25 cm². If each side has its length doubled, what is its new area?

☐ cm² 100

Q10

6 coins are on a table: 5c, 10c, 20c, 50c, $1, $2
How many different amounts can be made up using two of the coins?

15

Q11

6 coins are on a table: 5c, 10c, 20c, 50c, $1, $2
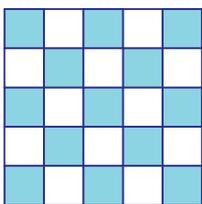How many different amounts can be made up using three of the coins?

20

Q12

Four cards numbered 2, 4, 7 and 8 are shuffled and three are dealt face up to form a 3-digit number. List all the possible numbers which are less than 400.

247   248   274   278   284   287

Q13

How many squares (of any size) can be found on this square grid?

55

Q14

There are 8 teams in a soccer competition. Each team played each of the other teams once. Complete the table to find how many games are played in the competition.

No.of teams	No.of games played
2	1
3	3
4	6
5	10
6	15
7	21
8	28

No. of games played = 28

Q15

There are 9 teams in a soccer competition. Each team played each of the other teams once. Complete the table to find how many games are played in the competition.

No.of teams	No.of games played
2	1
3	3
4	6
5	10
6	15
7	21
8	28
9	36

No. of games played = 36

Q16

I start with a number, divide it by 4, then subtract 10. I am left with 1. Find the number I started with.

44

Q17

I start with a number, divide it by 8, then add 30. I am left with 34. Find the number I started with.

32

Q18

Jaya is 4 years older than Anthony and is double Peter's age. If Peter is 9 years old, how old is Anthony?

14

Q19

Draw a rectangle with an area of 50 cm². If each side has its length doubled, what is the new area?

cm² 200

Q20

Draw a square with an area of 36 cm². If each side has its length halved, what is the new perimeter?

cm 12

Q21

Draw a square with an area of 144 cm². If each side has its length halved, what is the new perimeter?

cm 24

Q22

Using only the digits 2, 3 and 7, how many 2-digit numbers can be formed? The digits may not be repeated.

6

Q23

Using only the digits 2, 3, 4 and 6, list all the 3-digit odd numbers that can be formed. The digits may not be repeated.

243   263   423   463   623   643

Q24

What is the largest 3-digit odd number that has a digit sum of 15?

951

Q25

There are five people in a room and each person shakes hands with every other person once. How many handshakes are there altogether?

10

Q26

There are 4 people in a room and each person shakes hands with every other person once. How many handshakes are there altogether?

6

Q27

There are 7 people in a room and each person shakes hands with every other person once. How many handshakes are there altogether?

	21

Q28

Josh is 8 years older than Seb and Eve is twice Seb's age. Maya is 4 years older than Eve. If Maya is 16 years old, how old is Josh?

	14

Q29

Amy is 4 years younger than Rory and Jaya is half Rory's age. Bella is 7 years older than Jaya. If Bella is 15 years old, how old is Amy?

	12

Q30

Megan is 2 years older than Jacob and Zara is half Jacob's age. Ava is 4 years older than Zara. If Ava is 12 years old, how old is Megan?

	18