

Dan the detective

1. Dan the detective looked for a number.
He found a two-digit number less than 50.
The sum of its digits was 12.
Their difference was 4.
What number did Dan find?



2. Dan found a two-digit odd number.
One of its digits was half the other.
The number was greater than 50.
What number did Dan find?

Rows of coins



1. Take five coins: 1p, 2p, 5p, 10p, 20p.
Put them in a row using these clues.
The total of the first three coins is 27p.
The total of the last three coins is 31p.
The last coin is double the value of the first coin.
2. Take six coins: two 1p, two 2p and two 5p.
Put them in a row using these clues.
Between the two 1p coins there is one coin.
Between the two 2p coins there are two coins.
Between the two 5p coins there are three coins.

What if you take two 10p coins as well, and
between them are four coins?

Roly poly

The dots on opposite faces of a dice add up to 7.

1. Imagine rolling one dice.

The score is the total number of dots you can see.

You score 17.

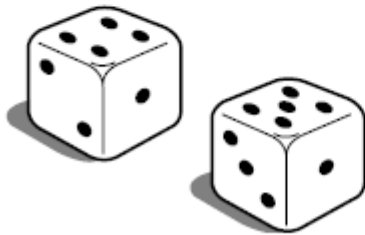
Which number is face down?

How did you work out your answer?



2. Imagine rolling two dice.

The dice do not touch each other.



The score is the total number of dots you can see.

Which numbers are face down to score 30?

Spaceship



Some Tripods and Bipods flew from planet Zeno.
There were at least two of each of them.

Tripods have 3 legs.

Bipods have 2 legs.

There were 23 legs altogether.

How many Tripods were there?

How many Bipods?

Find two different answers.

