1 Eva is baking cakes and cookies.
For every 1 cake, she will bake 2 cookies.
a) If Eva bakes 3 cakes, how many cookies will she bake?
b) If Eva bakes 10 cookies, how many cakes will she bake?
(2) The ratio of red to yellow counters is 2:3


There are 20 counters in total.
How many counters of each colour are there? You can colour the counters to help you.
(3) Tom has 5 green cubes for every 3 yellow cubes.

He has 16 cubes in total.
Draw a diagram to represent this.
(4) Esther is building a tower of cubes.

The ratio of red to yellow cubes is $3: 1$
The tower has 6 yellow cubes. How many red cubes are there?


Nijah plays 21 games of chess.


For every 2 games she wins, she loses 5 games.
How many more games does she lose than win?

6 a) Huan is making a drink by mixing 1 part juice with 5 parts water
Complete the table to show the amounts he would need to use.

| Juice | 1 litres | 2 litres | 4 litres | 100 ml | 200 ml | 300 ml |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water | 5 litres |  |  |  |  |  | 30 litres | 750 ml |

b) Huan makes 1 litre 500 ml of drink in total. How much juice and water does he need to use?
(7) A group of students study French or German in the ratio 3:7
a) Which subject has the most students?
b) Draw a diagram to represent this.
c) There are 80 students in total.

How many more students study German than French?

8 Describe a situation for each bar model.
a) green
blue

c)

b)


Compare answers with a partner.
What is the same and what is different?

