

- 1) Stefan has two different packs of football cards. He has 64 red football cards and 48 green football cards. He wants to put them into an album with some pages of red cards and some pages of green cards. He wants to have the same number of cards on each page of the album. He asks his friends for some help.



Each page
should have
6 cards on it.



Each page
should have 8
cards on it.

Who do you agree with? Explain your answer.

- 2) Pawel is working on a craft project. He has two pieces of ribbon. One is 180cm long and the other is 240cm long. He needs to cut the ribbons into equal pieces. He doesn't want to waste any ribbon by having any left over.

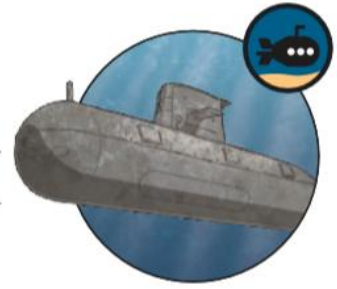
a) Can you find all the different possible lengths of ribbon he could cut?

b) Can you explain why he would not be able to cut the ribbons into lengths of 40cm?

- 1) In Rose's submarine, the pressure gauge beeps every 3 minutes and the depth gauge beeps every 5 minutes. How many times in an hour will the two gauges beep at the same time? Provide examples to back up your answer.

- 2) Rose leads a team of two divers who send reports back to her monitor throughout the day, from 7 a.m. to 1 p.m. Caspar sends his reports back every 12 minutes. Ingrid sends her reports back every 18 minutes. How many times a day will their reports come into the monitor at exactly the same time? Explain your reasoning using examples.

Can you work out all the times that the reports will come in at the same time?



Can you draw lines to add one number to another to make all the primes from 50 to 100? Record your calculations as you go along.

