## Analysing Patterns in Sequences

- Here we are going to look at some letter and number sequences.
- You have to write in the last member of each sequence.
- Look carefully at the first three members of each sequence.
- Analyse how the second member changes from the first.
- Now how does the third change from the second?
- Make this same change to the third in order to find the fourth member.



## Examples

2 6 10 ?

The second member of the sequence (6) is the first (2) plus 4.

The third member (10) is the second (6) plus 4.

The fourth member should be the third (10) plus 4 which is 14.

ABC ABD ABE ?

The second member ...the last letter increases by one from C to D.

The third member ...the last letter increases by one from D to E.

The fourth member should be ABF ...AB the same, but last letter goes from E to F.

## Student worksheet

Write in the missing member of these sequences. When asked by the teacher, talk aloud about the thoughts you had in finding the missing member to the class.

1.	AA	ВВ	CC	
2.	AC	СС	EC	
3.	ВҮВ	CYC		EYE
4.	AAAW		AAAY	AAAZ
5.	OOXX		QQXX	RRXX
6.	ZZAA	YYAA		WWAA
7.	AC		EC	GC
8.	CAH	СВН	ССН	
9.		BFGB	CFGC	DFGD
10.	4	9	14	19

1.	3	4	6	7	9	10	
12.	2	7	11	14			
13.	24	20	18	14		8	
14.	2	4	8	16	32		
15.	3	5	9	15			

## Student worksheet

Draw in the missing information in each sequence.
16.
17.
18.
What is missing in the sequence?
19.
21.