Extension Activity Number 4
Social Media and the Internet

The Internet is an international network of computers that allow people to communicate with each other, gather information, watch movies, listen to music, do our shopping and a whole bunch of other useful activities. One area of growth on the Internet is Social Media. Social Media is the ability to communicate and share information with each other using various programs like FACEBOOK, INSTANT MESSENGER, TWITTER, etc. As technology improves, more people will have internet at home and on their mobile phones. This means that it will get cheaper and reach more people. A few years ago you would read a story in the newspaper and if you liked the article, you could write a letter to the editor (your letter would appear on the "letters to the editor" page, you could have driven to your friends and shown them a copy of the story or maybe you could have faxed a copy to your friends. This process could take a week and sometimes longer. With the Internet, you could read the article on a website, share a link to the article with a group of friends, comment on the article on the same page the article appears on the website and this could be done within a few seconds. What makes this more astonishing is that you could share this article with thousands of people in a matter of seconds.

Understanding the Internet and its reach

1. Draw 3 computers. Draw lines joining each computer to each of the others. How many lines did you need to draw? Do the same for 4 and computers. Plot your findings in the table below. Do you notice any patterns?
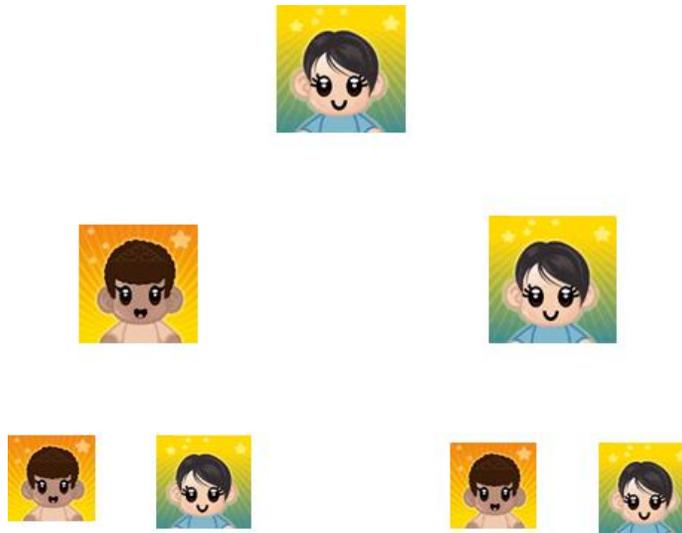
   (Note: When two computers are connected with one line there is no need to draw an additional line)

Number of Computers	Number of lines
3	

4	
5	
6	
7	

2. 2 people LIKE a photo they have just seen on a website so they click the [Like] button on the screen. Some of their friends might like the photo too and also click the [Like] button. In a short amount of time, the photo could be viewed by thousands of people. Try this as an exercise: Draw a TREE diagram to show how quickly things can be shared on the Internet. First draw 1 person and then below that person draw 2 people to show that they shared the picture with two friends. Then draw 2 friends under each of the friends (like you see in the diagram below) to show that they have shared the picture with two of their friends and draw this for 6 layers.The diagram below already shows the first three layers.

How many children will be reached on the 6th layer. Fill the numbers into the table below.

Layer	Number of children
1	
2	
3	
4	
5	
6	

Comment on the pattern that the numbers are following in the table above.

If you could continue the pattern for 20 layers, how many people would you reach on the 20th level. Before calculating this, **'guestimate'** what you think the answer will be and compare this to your findings. [hint: on a regular calculator type 2 then X and then X again. Now push = . Each time you push = watch how the number grows and compare this to your table.]