## F.6A Class Performance on 28/9/2012

| Voice-over: | Bonnie Tam (6A 31) |
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| King: | Clifford Man (6A 27) |
| Queen: | Sandy Chiu (6A 10) |
| General: | John Chung (6A 12) |
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Voice-over: Once upon a time, there was a kingdom called Number. First of all, let me introduce our king to you. He is the King. Behind him, she is our Queen. She is a very intelligent woman and has rich knowledge in mathematics. This man is the General. His name is Jack. He is brave and has won a number of battles. Recently, our enemies were attacking our border. Our general, Jack drove the enemies out of our border bravely. The King was so happy that he promised to give a big reward to Jack.

King: Ha! Well done! You deserve a big reward for being so helpful.

Jack: Thank you, my honorable king. It's my duty to protect our kingdom.

King: I am excited. Now I would like to offer you great fortune as the reward. Take out my favourite chessboard. (Some soldiers carry a chessboard out.)

Look at it. Let's make the reward special...See, there are 64 squares. On the first day, I will give you 1 dollar, 2 dollars on the second day, 4 dollars on the third day, 8 dollars on the fourth day and so on until the 64th day. (He uses a pointer to point at the chessboard) That is, every day I will give you twice the amount of money of the previous day until the 64th day. Ha, are you satisfied? Are you excited?

Jack: Yes, of course, Your Majesty. Thank you for the valuable reward! (Jack leaves)

Queen: I totally disagree with you, the King! You can't do that. It will use up all the money in our kingdom.

King: What? I have so much money now. It's just a small amount. Don't worry!

Queen: No, no, no! Let me tell you the truth.
(The soldier turns the chessboard to the other side on which the calculation is written)

Queen: Look! If you really give such a reward to Jack.... (She points to the calculation) true, he will simply get 1 dollar on the first day, 2 dollars on the second day, 4 dollars on the third day BUT..... on the 64th day, he will actually get 2 to the power 63 and the sum is about 20000000000000000000 dollars. The King, it's an enormous figure!

King: Oh my God! I feel dizzy! (The King becomes unconscious. He sits on a chair. )

Voice-over: The king feels very confused. He understands that as a king, he needs to do as he has promised. Later, he gives most of the money in his country to Jack. But now, he faces another difficulty - there isn't enough money in the kingdom now. So he decides to use the time machine to go to the 21st century so that he may find some help.

King: Who can help me? Jesus Christ, I can't lose my kingdom. (King roams on the street)

Shark: hey guy, I am Bom Men Promise. It seems you need some help.

King: Yes, I need money. I need so much money.

Shark: All right, I can satisfy your want. I can lend you money.

King: Oh great! I need one million dollars. Please lend me the money as soon as possible.

Shark: The interest rate of our company is $33 \%$ per annum, compounded yearly. Are you willing to borrow?

King: Of course!

Voice-over: After the king receives the money, he uses the time machine to go back to his kingdom and at last the problem of money shortage has been solved. But the king has forgotten to repay the interest and 10 years later...

Queen: Darling, do you remember you have borrowed one million from a company ten years ago?

King: Oh my god! I have forgotten. I will repay the interest tomorrow.

Queen: Are you serious?! Do you know how much money you need to repay? The interest rate is $33 \%$ per annum, compounded yearly. You have the loan period for ten years. (The queen takes out cardboard with a calculation on it) The calculation is like this. You have borrowed one million dollars for ten years and the interest rate is $33 \%$ per annum. Therefore the total amount will be $1000000 \times(1.33)^{\wedge} 10$, that is 17318744 , about seventeen million. It is almost 17 million dollars!!!! 17 times more in 10 years. What a stupid king! We are over; I won't be your queen anymore. (Queen leaves the stage)

King: You should have told me earlier.

Queen: You should have asked me much earlier. You deserve it.

Mr. Chan: Students, what have you learnt from our story?

S1: We can see how significant Mathematics is in our daily life.

S2: Yup! It's amazing to see how wealth and debt can grow exponentially in a split second.

S3: Right! We must study Maths by heart.

Mr. Chan: Right! The two formulae have been taught in your mathematics lessons in F. 3 and F.5.

S4: Really?! We have to do more thorough revision and give more thoughts to its application in our daily life right now.

Mr. Chan: Awesome! I'm so glad to hear that(Thumbs up). Bear in mind our school motto

All: Sure. Diligence, Frugality, Loyalty \& Faithfulness. We will surely make it with our "Yorkitude"!!! You too, right? Thank you very much.

