5C   Class Presentation   Equilateral triangles

A, B, C: (Sing)   Happy Birthday to you, Happy Birthday to you!

Jenny: Thank you very much for coming to my birthday party. My mum and dad has bought me a birthday cake, but up till now they still haven't told me about the shape of the cake. I wonder what shape it is.

B: Let's suppose the cake is a circle one. Do you know how to cut the cake into equal parts for everybody, Jenny?

Jenny: How many people are there altogether?

A: There's four of us in this room, and your dad and mom are outside. So altogether there are six people. You should cut the cake into 6 equal parts.

B: Jenny, do you know how to cut the cake into 6 equal parts?

C: Of course she knows! Don't you remember that she is good at Mathematics?

Jenny: I know that there are 360 degrees in a circle. So if I'm going to cut it into 6 equal parts, I'll have to divide 360 degrees into 6 equal parts, which means each part is 60 degrees. OK, imagine there is a cake over here, and I'll show you how to cut it into six equal parts.   (then walks over to the cake and cuts the imaginary cake into 6 parts)

C: See, I have told you that Jenny is good at mathematics. Oh, I notice something special.

B: What is it?

C: I notice that if you cut the cake into 6 equal parts, you will get six sectors (扇形).   We learned about sectors in our mathematics lesson, didn't we?

Jenny: Yes, we did. And if you look at each sector, you will also find an equilateral triangle (等邊三角形) inside the sector.

B: Wait a minute, what is meant by "equilateral triangle"?

Jenny: An equilateral triangle means all three sides of the triangle are the same, and each angle is equal to 60 degrees.   OK. Let's look at the imaginary cake and find out the 6 equilateral triangles in the 6 sectors of the cake.   (then count 1,2,3,4,5,6 equilateral triangles)

ALL: (loudly and excitedly)   Yeah equilateral triangles!!
    Wow, amazing!.....

A: Speaking of equilateral triangles, do you know that ancient Egyptians (古埃及人) liked to use this shape in their lives very much?

B: Yeah, that reminds me of something I learned in F.1 History class. I learned that Egyptians built pyramids (金字塔) in the shape of triangles.

(EGPYPTIAN MUSIC is played.)

(Suddenly, a girl jumps out and dances Egyptian dance while saying:
YES , we Egyptians liked to use equilateral triangles in our architecture. And we Egyptians were the first people to divide a circle into 360 degrees…..)   (Then Jenny pushes her away)

Jenny: Thank you Egyptian Lady. Let me repeat what she's said. The Egyptians liked to use equilateral triangles in their architecture. And the Egyptians were the first people to divide a circle into 360 degrees…..

C: I think ancient Egyptians were really smart, and they were able to use mathematical knowledge in their lives.

A: The way that Egyptians cut a circle into 360 degrees also affects the way time is recorded. For example, we divide one hour into 60 minutes, and 1 minute into 60 seconds…..

Jenny: OK, OK. I think we'll have to stop our discussion on 360 degrees and equilateral triangle here. My mum and dad are coming. Let's have a look at my birthday cake.

Mom and Dad: Happy Birthday, Jenny!

ALL: What?   It is a SQUARE!!

Mom and Dad: Don't you like the birthday cake??

Jenny: I like the cake, but I've never thought that it is a square, not a circle!
Anyways, thank you for listening to our presentation. See you.