JAG01 Unit 9 Past Life and Fossils II

Task 1 Model presentation

A) Complete the transcript of the presentation using these words.

amazingly *discovered* *forests* *fossils* *has been* *have been*
has eaten *hopefully* *was created* *was made*

Today, I want to tell you about an amazing discovery that (1) …… not so long ago. Take a look at this picture. This is Hang Son Doong – the world´s largest cave. I first heard about this place when I saw an unbelievable video of it on YouTube. Hang Son Doong is in Vietnam. Its name means ´Mountain River Cave´. How big is it? Well, it´s more than 5 kilometres long, 200 metres high and 150 metres wide. In some places the cave is big enough to fit a jumbo jet inside! The cave (2) …….. by a river which (3) ……. away the limestone of the Annamire Mountains. How was it (4) …… ? Well, (5) ……., nobody knew about this place until a local man found it by accident in 1991. And it was only in 2009 that the cave became internationally known after a group of British scientists went there to study it. Inside the cave, entire (6) …… stretch out across the cave floor, and 300-million-year-old (7) ……. have been found inside. The cave is so large it even has its own weather system. Very few people (8) …….. inside the cave although it (9) …… open to the public since 2013. (10) ……. , I´ll get a chance to go there myself one day. It looks like a truly incredible place.

B) Divide the presentation into paragraphs and describe their function.

C) Review the text in terms of presentation skills. Do you think it would make a good presentation? Why?

(adapted from Bohlke, D. *Keynote,* National Geographic Learning, 2017.)

Task 2 A short talk

Work in pairs. Each of you will receive different material. Study the information and prepare a short presentation about it. Tell your partner. Then swap. Give each other feedback.

Task 3 Numbers

a) What do you have to calculate in geology?

b) Give an example of a number:

even _____, odd ____, prime _____, decimal ____

What does it mean to round a number up/down?

c) Read these numbers or fractions:

0.2	2.053
0.05	1800
2479	1 415 605
549492008	2 418 962 573
2,053	1/3; ¾; 2/5; 14/15

c) Listening: How big is a billion?

(https://www.youtube.com/watch?annotation_id=annotation_215752&feature=iv&src_vid=SbZCECvoaTA&v=C-52AI_ojyQ)

Listen and watch, answer the questions below:

People understand "a billion" differently - what does it depend on?

What systems do scientists use?

What is the short system based on?

When did Britain officially adopt the short system? Why did they adopt it?

What is the long system based on?

Which system seems to make more sense?

What is the continental word for 1 000 000 000? What do they call it in the financial world? What system do they have in Canada?

What is a myriad?

d) Simple arithmetics

Look at the way we say these examples:

4 + 4 = 8	four and (plus) four is / equals eight
9 − 2 = 7	nine minus two is seven
5 × 5 = 25	five times five is twenty-five *or* five multiplied by five is twenty-five
8 ÷ 4 = 2	eight divided by four is two

Here are some more arithmetical symbols. Notice how to say them.

2^2	two squared	$\sqrt{\ }$	square root of …
-2^3	minus (negative) two cubed	$\sqrt[3]{\ }$	cube root of …
2^4	two to the power of four	π	pi
$\log_{10}7$	log of seven to the base ten	x=3(a+b)	x equals three, bracket a plus b, bracket

Now solve these maths problems and read them out.

a) 125 − 69 = …
b) 9 × 5 = …
c) 30 ÷ 6 = …
d) $\sqrt{16}$= …
e) x=4 (2+7)
f) 9^2 = …
g) $\sqrt[3]{27}$= …
h) 2^4 = …
i) π = …

Look at this example:

Add six to seven. Now multiply by four. Subtract four. Divide by twelve. What is the answer?

6 + 7 = 13, 13 × 4 = 52 52 − 4 = 48 48 ÷ 12 = ?

e) Write down graphical image of the problems below, then take turns in saying them aloud and finding the answer (one of you should say the equation and the other should give the answers without looking at the paper).

1) Multiply 7 by 9. Add 9. Divide by 6. Subtract 3. What is the answer?
2) Subtract 8 from 24. Divide by 2. Add two. Multiply by 10. What is the answer?
3) Add six to eight. Multiply by 3. What is the answer?

f) Using letters as symbols, write a formula for each relationship.

1) Work is the product of force times the distance through which the force acts. _____
2) The volume of a cube is calculated by multiplying the length times the width times the height. _____
3) Power is the rate at which work is done; it is computed by dividing work by time. _____
4) Kinetic energy is calculated as one half the product of the mass times the velocity squared. _____

Lesson adapted from: A. Rozkošná (*Sources:* Bates, Martin and Dudley-Evans, Tony: *Nucleus of General Science.* Longman 1990).