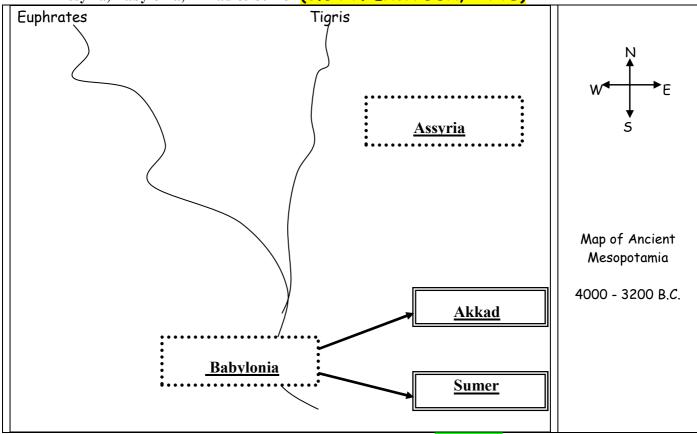
PART ONE – WHILE LISTENING – SUMER - ANSWER KEY – 13 pts.

- 1. 'Mesopotamia' is a Greek word which means between the rivers. (1 PT.)
- 2. Fill in the following 4 boxes on the map to show where these ancient civilizations were located:

Assyria, Babylonia, Akkad & Sumer (0.5 PT. EACH BOX, 2 PTS)



- 3. Why is Sargon a significant character in history? (1 PT United the separate city states / first empire-builder in history)
- 4. Why are the ancient Sumerians considered to be the creators of the first civilization? (1 PT.)

 They established cities (as opposed to a nomadic or hunter-gatherer life style)
- 5. Although the land in ancient Sumer was very <u>fertile</u>, Sumerians had to develop methods of irrigation because <u>there was no rain for 8 months / there was very little rain fall</u> (1 PT.)
- 6. Which means of transport did the Sumerians use for trade between cities and distant regions?

 Water / riverboats (1 PT.)
- 7. For which purpose did the Sumerians use the wheel for the first time in history? **Transport** (1 PT.)
- 8. Why did the Sumerians create the first lunar calendar? (1 PT.)

 To be able to plant and harvest at the proper time / to find the right times for agriculture
- 9. What is the main difference between the lunar calendar of the Sumerians and the solar one? (1 PT.)

 <u>Lunar is 11 days shorter</u>
- 10. What is Dr. Harvey's opinion on the invention of writing by the Sumerians? (1 PT.)

 It was gradual / it didn't happen in one day / it wasn't alphabetical
- 11. What made Cuneiform a difficult system of writing? <u>Characters had multiple meanings</u> (1 PT.)
- 12. What was the main purpose of majority of Sumerian cuneiform writing? **business / administration**(1 PT.)

LISTENING ONE - SUMER - TAPESCRIPT

Berfu: Good morning Dr. Harvey, may I come in?

Harvey: Of course Berfu, come in; I was expecting you – you're right on time. How are you?

Berfu: I'm OK, thankS; a bit tired, though. I stayed up until 3 a.m. working on the essay before coming to talk to you about it.

Harvey: Please have a seat. OK, let's see now. You're here to ask me some questions???

Berfu: Yes, there are still a few issues I don't understand very well and a few points that I need clarification on.

Harvey: Shall I start by giving you a quick recap and then we move on to your questions?

Berfu: Yes, that sounds great.

Harvey: OK then. Well, as I'm sure you know, having done the research, that characteristics of civilization first appeared in Mesopotamia. The term Mesopotamia comes from Greek and stands for "between the rivers". The rivers we are talking about here are the Tigris and the Euphrates rivers, and Mesopotamia was the whole plain between and on either side of the Tigris and Euphrates rivers. The plain was bordered to the north and east by mountain ranges and in the foothills of these mountains agriculture was first practiced. Mesopotamia was divided into two parts: Assyria in the north and Babylonia in the south. In addition, Babylonia was divided into two regions: Akkad in the north and Sumer in the south. And the time period we are talking about here is between 4000 and 3200 B.C. OK, now let's see what you have - first of all, tell me what you found out about the type of government the Sumerians had.

Berfu: OK. My research shows that during the first 9 centuries of the Sumerian era, there wasn't a unified government in Sumer; Then, around 2335 B.C., all Sumer was conquered and unified by a warrior from Akkad. This warrior who united the separate Sumerian states was called 'Sargon' – I think it means 'true king'. So, according to my notes, this makes Sargon the first identifiable empire-builder in history because he united Akkad and Sumer. Am I doing OK so far?

Harvey: Yes, you are, go on.

Berfu: But I have a question first. You said that characteristics of civilization first appeared in Mesopotamia. According to the dictionary what we mean by civilization is the culture and way of life of a society or country at a particular period in time. Do you mean the same thing when you say civilization first appeared in Mesopotamia?

Harvey: Not exactly – the definition you gave me is the modern day meaning of civilization. When I say civilization first appeared in Mesopotamia I mean that Mesopotamia was the first example of establishment of cities - its society and culture rested on the existence of cities. So, the Sumerians were not a nomadic or hunter-gatherer society.

Berfu: You mentioned that agriculture was practiced in this region for the first time in history. Now, as far as I know Mesopotamia was not a good agricultural region because its climate was too hot and as a result irrigation was needed. How could the Sumerians develop agriculture in such a hot region where irrigation was essential?

Harvey: Good point Berfu. Well, you see, each year the two great rivers were swollen with the winter snows of the northern mountains, and each year at flood stage the rivers spread a very thick layer of immensely fertile silt across the flood plain where they approached the Persian Gulf. So, Sumer had a splendid agricultural potential with such fertile land. But, you're right about the heat in the region and the necessity of irrigation. So, the Sumerians developed water-holding pools and canals, which was the beginning of irrigation in the region. Like I said, although the land was extremely fertile, irrigation was essential because there was almost no rainfall for eight months of each year.

Berfu: But Sumerians did not rely on only agriculture to survive, did they? They were also heavily involved in trade.

Harvey: Yes they were, in fact, they had to be. Because of the geographical location, Southern Mesopotamia was entirely lacking in resources such as stone, minerals or metals and even trees, except its soft palm trees. This meant that Sumer's inhabitants were forced to heavily rely on trade and these materials had to be transported from long distances such as Syria and Asia Minor, I mean, Turkey. So, water transport down the Tigris and Euphrates solved the problem and the river boats brought such goods as stone, copper, and timber from the north. For the shorter distance transport of goods overland, however, people continued to rely on donkeys. And, an increase in trade between Sumerian cities and between Sumeria and other, more distant regions, led to the growth of a merchant class.

Berfu: So it must have been that need for trade which led to one of the most remarkable inventions of history by the Sumerians – the wheeled transport. Am I correct?

Harvey: Yes you are - good job Berfu! So, yes, what about important Sumerian inventions? What information have you found out about those?

Berfu: Oh, Sumerians had more than just one remarkable invention but I suppose the most significant one, like I said, was the wheeled transport, around 3200 B.C. My notes also state that although wheels existed in other parts of the world, they were not used for transport until the Sumerians started to use them for this purpose around 3200 B.C.

Harvey: That's right. So, what other important Sumerian inventions did you find information on?

Berfu: The Lunar Calendar and the Cuneiform writing.

Harvey: Excellent. Any problems with those?

Berfu: Well, I had a bit of a problem with the significance of the Lunar calendar – can you explain why it's so important?

Harvey: Sure. The Sumerians developed the first calendar, the lunar calendar, which they adjusted to the phases of the moon with a day of 24 hours and a week of seven days. Remember what I said to you about the difficult climate of the region. For Sumerians, it was absolutely essential to begin planting seeds or harvesting at exactly the proper time; so, it was essential to find some reliable way of marking the passage of days until the proper times for agricultural work came around. And the simplest way of doing this was to utilize the cycles of the moon.

Berfu: Oh, OK, that makes sense now. Now, the moon moves from the thinnest crescent and back over the course of 29 and half days, right? So, the moon's completion of this cycle was the basic timekeeping unit for the Sumerians. And they must have concluded that when the moon had passed through 12 such units, a 'year' had passed and it was time to start planting again.

Harvey: Yes, that's it.

Berfu: But can I say something? Sumerians did not know that a 'year', I mean what we now mean by a 'year', is actually formed by the completion of the earth's rotation around the sun, did they? And according to their calculations, the lunar year they used would be shorter than our solar year, right?

Harvey: Exactly. It would be about 11 days shorter. But, over the centuries they learned that they had to add a month to their calendars every few years in order to predict the recurrence of the seasons with sufficient accuracy.

Berfu: And they also invented writing.

Harvey: Well, saying that writing was 'invented' by the Sumerians would be slightly misleading because writing was not really "invented" in one day. The emergence of Sumerian writing was gradual, evolving over the course of a millennium, that is between 3500 and 2500 B.C. They first used representation of ideas by means of pictures and that slowly developed into the writing of some kind, but this was not alphabetic writing as we currently know it – which is again why I said it would be misleading to say the Sumerians invented writing. By the way, what have you got on the Cuneiform?

Berfu: OK. The texts I looked at said that the Cuneiform reached its fully developed form in Sumer around 2500 B.C. It was written on a piece of soft clay, using an object like a sharp wedge, a piece of metal at the end of a reed, so on. It definitely was not an easy system of writing. In total, there were about 500 characters at this time but that wasn't the problem. The problem was that many of these 500 characters had multiple meanings. Obviously, this made cuneiform writing much more difficult to learn than subsequent writing systems based on alphabets.

Harvey: So, are you saying that the Cuneiform wasn't very effective?

Berfu: Not really. Cuneiform served well enough to be used as the only writing system of Mesopotamia for two millennia, until about 500 B.C. And I found an interesting point about the types of cuneiform that survived. About 90% of the cuneiform texts surviving from the Sumerian era are business or administrative records and the other 10 % fall roughly into the literature category – proverbs, hymns and fragments of mythic tales.

Harvey: That is true as well. So, Berfu, are we OK now? - you seem well-prepared to write your essay. If you don't have any other questions, I have to go to a meeting.

Berfu: No Dr. Harvey – thank you very much for giving me your time and for helping me out.

Harvey: You are very welcome – don't forget the deadline, tomorrow 5 p.m.

Berfu: I won't. Bye bye