Reading Section

Opportunists and Competitors

Growth, reproduction, and daily metabolism all require an organism to expend energy. The expenditure of energy is essentially a process of budgeting, just as finances are budgeted. If all of one’s money is spent on clothes, there may be none left to buy food or go to the movies. Similarly, a plant or animal cannot squander all its energy on growing a big body if none would be left over for reproduction, for this is the surest way to extinction.

All organisms, therefore, allocate energy to growth, reproduction, maintenance, and storage. No choice is involved; this allocation comes as part of the genetic package from the parents. Maintenance for a given body design of an organism is relatively constant. Storage is important, but ultimately that energy will be used for maintenance, reproduction, or growth. Therefore the principal differences in energy allocation are likely to be between growth and reproduction.

Almost all of an organism’s energy can be diverted to reproduction, with very little allocated to building the body. Organisms at this extreme are “opportunists.” At the other extreme are “competitors,” almost all of whose resources are invested in building a huge body, with a bare minimum allocated to reproduction.

Dandelions are good examples of opportunists. Their seedheads raised just high enough above the ground to catch the wind, the plants are no bigger than they need be, their stems are hollow, and all the rigidity comes from their water content. Thus, a minimum investment has been made in the body that becomes a platform for seed dispersal. These very short-lived plants reproduce prolifically; that is to say they provide a constant rain of seed in the neighborhood of parent plants. A new plant will spring up wherever a seed falls on a suitable soil surface, but because they do not build big bodies, they cannot compete with other plants for space, water, or sunlight. These plants are termed opportunists because they rely on their seeds’ falling into settings where competing plants have been removed by natural processes, such as along an eroding riverbank, on landslips, or where a tree falls and creates a gap in the forest canopy.

Opportunists must constantly invade new areas to compensate for being displaced by more competitive species. Human landscapes of lawns, fields, or flowerbeds provide settings with bare soil and a lack of competitors that are perfect habitats for colonization by opportunists. Hence, many of the strongly opportunistic plants are the common weeds of fields and gardens.

Because each individual is short-lived, the population of an opportunist species is likely to be adversely affected by drought, bad winters, or floods. If their population is tracked through time, it will be seen to be particularly unstable—soaring and plummeting in irregular cycles.

The opposite of an opportunist is a competitor. These organisms tend to have big bodies, are long-lived, and spend relatively little effort each year on reproduction. An oak tree is a good example of a competitor. A massive oak claims its ground for 200 years or more, outcompeting all other would-be canopy trees by casting a dense shade and drawing up any free water in the soil. The leaves of an oak tree taste foul because they are rich in tannins, a chemical that renders them distasteful or indigestible to many organisms. The tannins are part of the defense mechanism that is essential to longevity. Although oaks produce thousands of acorns, the investment in a crop of acorns is small compared with the energy spent on building leaves, trunk, and roots. Once an oak tree becomes established, it is likely to survive minor cycles of drought and even fire. A population of oaks is likely to be relatively stable through time, and its survival is likely to depend more on its ability to withstand the pressures of competition or predation than on its ability to take advantage of chance events. It should be noted, however, that the pure opportunist or pure competitor is rare in nature, as most species fall between the extremes of a continuum, exhibiting a blend of some opportunistic and some competitive characteristics.

1. The word **squander** in the passage is closest in meaning to

- extend
- transform
- activate
- waste
2. The word **none** in the passage refers to

- food
- plant or animal
- energy
- big body

3. In paragraph 1, the author explains the concept of energy expenditure by

- identifying types of organisms that became extinct
- comparing the scientific concept to a familiar human experience
- arguing that most organisms conserve rather than expend energy
- describing the processes of growth, reproduction, and metabolism

Paragraph 1 is marked with an arrow |—|.

4. According to the passage, the classification of organisms as *opportunists* or *competitors* is determined by

- how the genetic information of an organism is stored and maintained
- the way in which the organism invests its energy resources
- whether the climate in which the organism lives is mild or extreme
- the variety of natural resources the organism consumes in its environment

5. The word **dispersal** in the passage is closest in meaning to

- development
- growth
- distribution
- protection

6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Because their seeds grow in places where competing plants are no longer present, dandelions are classified as opportunists.
- Dandelions are called opportunists because they contribute to the natural processes of erosion and the creation of gaps in the forest canopy.
- The term opportunists applies to plants whose seeds fall in places where they can compete with the seeds of other plants.
- The term opportunists applies to plants whose falling seeds are removed by natural processes.

7. The word **massive** in the passage is closest in meaning to

- huge
- ancient
- common
- successful

8. All of the following are mentioned in paragraph 7 as contributing to the longevity of an oak tree **EXCEPT**
• the capacity to create shade
• leaves containing tannin
• the ability to withstand mild droughts and fire
• the large number of acorns the tree produces

Paragraph 7 is marked with an arrow [ ].

9. According to the passage, oak trees are considered competitors because
• they grow in areas free of opportunists
• they spend more energy on their leaves, trunks and roots than on their acorns
• their population tends to increase or decrease in irregular cycles
• unlike other organisms, they do not need much water or sunlight

10. In paragraph 7, the author suggests that most species of organisms
• are primarily opportunists
• are primarily competitors
• begin as opportunists and evolve into competitors
• have some characteristics of opportunists and some of competitors

Paragraph 7 is marked with an arrow [ ].

11. Look at the four squares [ ] that indicate where the following sentence could be added to the passage.

Such episodic events will cause a population of dandelions, for example, to vary widely.

Where would the sentence best fit?

Click on a square [ ] to add the sentence to the passage.

12. Directions: Complete the table by matching the phrases below

Directions: Select the appropriate phrases from the answer choices and match them to the type of organism to which they relate. TWO of the answer choices will NOT be used. This question is worth 4 points.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click on View Text.

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Opportunists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vary frequently the amount of energy they spend in body maintenance</td>
<td>●</td>
</tr>
<tr>
<td>Have mechanisms for protecting themselves from predation</td>
<td>●</td>
</tr>
<tr>
<td>Succeed in locations where other organisms have</td>
<td>●</td>
</tr>
</tbody>
</table>
been removed

Have relatively short life spans

Invest energy in the growth of large, strong structures

Have populations that are unstable in response to climate conditions

Can rarely find suitable soil for reproduction

Produce individuals that can withstand changes in the environmental conditions

Reproduce in large numbers

Competitors
Lascaux Cave Paintings

In Southwest France in the 1940’s, playing children discovered Lascaux Grotto, a series of narrow cave chambers that contain huge prehistoric paintings of animals. Many of these beasts are as large as 16 feet (almost 5 meters). Some follow each other in solemn parades, but others swirl about, sideways and upside down. The animals are bulls, wild horses, reindeer, bison, and mammoths outlined with charcoal and painted mostly in reds, yellow, and browns. Scientific analysis reveals that the colors were derived from ocher and other iron oxides ground into a fine powder. Methods of applying color varied: some colors were brushed or smeared on rock surfaces and others were blown or sprayed. It is possible that tubes made from animal bones were used for spraying because hollow bones, some stained with pigment, have been found nearby.

One of the most puzzling aspects of the paintings is their location. Other rock paintings—for example, those of Bushmen in South Africa—are either located near cave entrances or completely in the open. Cave paintings in France and Spain, however, are in recesses and caverns far removed from original cave entrances. This means that artists were forced to work in cramped spaces and without sources of natural light. It also implies that whoever made them did not want them to be easily found. Since cave dwellers normally lived close to entrances, there must have been some reason why so many generations of Lascaux cave dwellers hid their art.

Scholars offer three related but different opinions about the mysterious origin and significance of these paintings. One opinion is that the paintings were a record of seasonal migrations made by herds. Because some paintings were made directly over others, obliterating them, it is probable that a painting’s value ended with the migration it pictured. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies.

Another opinion is that the paintings were directly related to hunting and were an essential part of a special preparation ceremony. This opinion holds that the pictures and whatever ceremony they accompanied were an ancient method of psychologically motivating hunters. It is conceivable that before going hunting the hunters would draw or study pictures of animals and imagine a successful hunt. Considerable support exists for this opinion because several animals in the pictures are wounded by arrows and spears. This opinion also attempts to solve the overpainting by explaining that an animal’s picture had no further use after the hunt.

A third opinion takes psychological motivation much further into the realm of tribal ceremonies and mystery: the belief that certain animals assumed mythical significance as ancient ancestors or protectors of a given tribe or clan. Two types of images substantiate this theory: the strange, indiscernible geometric shapes that appear near some animals, and the few drawings of men. Wherever men appear they are crudely drawn and their bodies are elongated and rigid. Some men are in a prone position and some have bird or animal heads. Advocates for this opinion point to reports from people who have experienced a trance state, a highly suggestive state of low consciousness between waking and sleeping. Uniformly, these people experienced weightlessness and the sensation that their bodies were being stretched lengthwise. Advocates also point to people who believe that the forces of nature are inhabited by spirits, particularly shamans* who believe that an animal’s spirit and energy is transferred to them while in a trance. One Lascaux narrative picture, which shows a man with a birdlike head and a wounded animal, would seem to lend credence to this third opinion, but there is still much that remains unexplained. For example, where is the proof that the man in the picture is a shaman? He could as easily be a hunter wearing a headmask. Many tribal hunters, including some Native Americans, camouflaged themselves by wearing animal heads and hides.

Perhaps so much time has passed that there will never be satisfactory answers to the cave images, but their mystique only adds to their importance. Certainly a great art exists, and by its existence reveals that ancient human beings were not without intelligence, skill, and sensitivity.

*shamans: holy people who act as healers and diviners
13. The word **others** in the passage refers to

- chambers
- paintings
- beasts
- parades

14. The word **Methods** in the passage is closest in meaning to

- Ways
- Shades
- Stages
- Rules

15. What are the bones found in the Lascaux caves believed to indicate?

- Wild animals sometimes lived in the cave chambers.
- Artists painted pictures on both walls and bones.
- Artists ground them into a fine powder to make paint.
- Artists developed special techniques for painting the walls.

16. Why does the author mention Bushmen in South Africa in paragraph 2?

- To suggest that ancient artists from all over the world painted animals on rocks
- To contrast the location of their rock paintings to those found at Lascaux
- To support the claim that early artists worked in cramped spaces
- To give an example of other artists who painted in hidden locations

Paragraph 2 is marked with an arrow **→**.

17. What can be inferred from paragraph 2 about cave painters in France and Spain?

- They also painted rocks outside caves.
- They did not live close to the cave entrances.
- They developed their own sources of light to use while painting.
- Their painting practices did not last for many years.

Paragraph 2 is marked with an arrow **→**.

18. Why does the author mention **secret ceremonies**?

- To present a common opinion held by many scholars
- To suggest a similarity between two opinions held by scholars
- To suggest a possible explanation for a weakness in an opinion expressed in the passage
- To give evidence that contradicts a major opinion expressed in the passage
19. The word **accompanied** in the passage is closest in meaning to

- represented
- developed into
- were associated with
- came after

20. According to paragraph 4, why do some scholars believe that the paintings were related to hunting?

- Because some tools used for painting were also used for hunting
- Because cave inhabitants were known to prefer animal food rather than plant food
- Because some of the animals are shown wounded by weapons
- Because many hunters were also typically painters

Paragraph 4 is marked with an arrow ➔.

21. According to paragraph 5, why do some scholars refer to a trance state to help understand the cave paintings?

- To explain the state of consciousness the artists were in when they painted their pictures
- To demonstrate the mythical significance of the strange geometric shapes
- To indicate that trance states were often associated with activities that took place inside caves
- To give a possible reason for the strange appearance of the men painted on the cave walls

Paragraph 5 is marked with an arrow ➔.

22. According to paragraph 5, if the man pictured with the birdlike head is not a shaman, he may have worn the headmask

- to look like an animal while a hunt took place
- to frighten off other hunters competing for food
- to prove that he is not a shaman
- to resist forces of nature thought to be present in animals

Paragraph 5 is marked with an arrow ➔.

23. According to paragraph 6, why might the puzzling questions about the paintings never be answered?

- Keeping the paintings a mystery will increase their importance.
- The artists hid their tools with great intelligence and skill.
- Too many years have gone by since the images were painted.
- Answering the questions is not very important to scholars.

Paragraph 6 is marked with an arrow ➔.
24. Look at the four squares that indicate where the following sentence could be added to the passage.

This made it easy for the artists to paint and display them for the rest of the cave dwellers.

Where would the sentence best fit?

Click on a square to add the sentence to the passage.

25. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

Scholars have wondered about the meaning of the subjects, location, and overpainting of Lascaux cave images.

Answer Choices

- The paintings may have recorded information about animal migrations, and may only have been useful for one migration at a time.
- Unlike painters of the recently discovered paintings, other Lascaux cave painters usually painted on rocks near cave entrances or in open spaces outside the caves.
- The human figures represented in the paintings appear to be less carefully shaped than those of animals.
- Some scholars believe that the paintings motivated hunters by allowing them to picture a successful hunt.
- It is possible that the animals in the paintings were of mythical significance to the tribe, and the paintings reflected an important spiritual practice.
- Scientific analysis suggests that paintings were sprayed onto the rock walls with tubes made from animal bones.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click on View Text.
Electricity from Wind

Since 1980, the use of wind to produce electricity has been growing rapidly. In 1994 there were nearly 20,000 wind turbines worldwide, most grouped in clusters called wind farms that collectively produced 3,000 megawatts of electricity. Most were in Denmark (which got 3 percent of its electricity from wind turbines) and California (where 17,000 machines produced 1 percent of the state’s electricity, enough to meet the residential needs of a city as large as San Francisco). In principle, all the power needs of the United States could be provided by exploiting the wind potential of just three states—North Dakota, South Dakota, and Texas.

Large wind farms can be built in six months to a year and then easily expanded as needed. With a moderate to fairly high net energy yield, these systems emit no heat-trapping carbon dioxide or other air pollutants and need no water for cooling; manufacturing them produces little water pollution. The land under wind turbines can be used for grazing cattle and other purposes, and leasing land for wind turbines can provide extra income for farmers and ranchers.

Wind power has a significant cost advantage over nuclear power and has become competitive with coal-fired power plants in many places. With new technological advances and mass production, projected cost declines should make wind power one of the world’s cheapest ways to produce electricity. In the long run, electricity from large wind farms in remote areas might be used to make hydrogen gas from water during periods when there is less than peak demand for electricity. The hydrogen gas could then be fed into a storage system and used to generate electricity when additional or backup power is needed.

Wind power is most economical in areas with steady winds. In areas where the wind dies down, backup electricity from a utility company or from an energy storage system becomes necessary. Backup power could also be provided by linking wind farms with a solar cell, with conventional or pumped-storage hydropower, or with efficient natural-gas-burning turbines. Some drawbacks to wind farms include visual pollution and noise, although these can be overcome by improving their design and locating them in isolated areas.

Large wind farms might also interfere with the flight patterns of migratory birds in certain areas, and they have killed large birds of prey (especially hawks, falcons, and eagles) that prefer to hunt along the same ridge lines that are ideal for wind turbines. The killing of birds of prey by wind turbines has pitted environmentalists who champion wildlife protection against environmentalists who promote renewable wind energy. Researchers are evaluating how serious this problem is and hope to find ways to eliminate or sharply reduce this problem. Some analysts also contend that the number of birds killed by wind turbines is dwarfed by birds killed by other human-related sources and by the potential loss of entire bird species from possible global warming. Recorded deaths of birds of prey and other birds in wind farms in the United States currently amount to no more than 300 per year. By contrast, in the United States an estimated 97 million birds are killed each year when they collide with buildings made of plate glass, 57 million are killed on highways each year; at least 3.8 million die annually from pollution and poisoning; and millions of birds are electrocuted each year by transmission and distribution lines carrying power produced by nuclear and coal power plants.

The technology is in place for a major expansion of wind power worldwide. Wind power is a virtually unlimited source of energy at favorable sites, and even excluding environmentally sensitive areas, the global potential of wind power is much higher than the current world electricity use. In theory, Argentina, Canada, Chile, China, Russia, and the United Kingdom could use wind to meet all of their energy needs. Wind power experts project that by the middle of the twenty-first century wind power could supply more than 10 percent of the world’s electricity and 10-25 percent of the electricity used in the United States.
26. Based on the information in paragraph 1 which of the following best explains the term wind farms?

- Farms using windmills to pump water
- Research centers exploring the uses of wind
- Types of power plant common in North Dakota
- Collections of wind turbines producing electric power

Paragraph 1 is marked with an arrow |——|.

27. The word emit in the passage is closest in meaning to

- use
- require
- release
- destroy

28. Based on the information in paragraph 3 and paragraph 4, what can be inferred about the states of North Dakota, South Dakota, and Texas mentioned at the end of paragraph 1?

- They rely largely on coal-fired power plants.
- They contain remote areas where the winds rarely die down.
- Over 1 percent of the electricity in these states is produced by wind farms.
- Wind farms in these states are being expanded to meet the power needs of the United States.

Paragraph 3 and paragraph 4 are marked with arrows |——|.

29. According to paragraph 3, which of the following is true about periods when the demand for electricity is relatively low?

- These periods are times when wind turbines are powered by hydrogen gas.
- These periods provide the opportunity to produce and store energy for future use.
- These periods create storage problems for all forms of power generation.
- These periods occur as often as periods when the demand for electricity is high.

Paragraph 3 is marked with an arrow ——.

30. In paragraph 4, the author states that in areas where winds are not steady

- power does not reach all customers
- wind farms cannot be used
- solar power is more appropriate
- backup systems are needed

Paragraph 4 is marked with an arrow |——|. 
31. According to paragraph 4, what can be inferred about the problems of visual pollution and noise associated with wind farms?

- Both problems affect the efficiency of wind farms.
- Possible solutions are known for both problems.
- Wind power creates more noise than visual pollution.
- People are more concerned about visual pollution than noise.

Paragraph 4 is marked with an arrow  .

32. The phrase this problem in the passage refers to

- interference with the flight patterns of migrating birds in certain areas
- building ridge lines that are ideal for wind turbines
- the killing of birds of prey by wind turbines
- meeting the demands of environmentalists who promote renewable wind energy

33. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- Hawks, falcons, and eagles prefer to hunt along ridge lines, where wind turbines can kill large numbers of migratory birds.
- Wind turbines occasionally cause migratory birds to change their flight patterns and therefore may interfere with the areas where birds of prey prefer to hunt.
- Some of the best locations for large wind farms are places that may cause problems for migrating birds and birds of prey.
- Large wind farms in certain areas kill hawks, falcons, and eagles and thus might create a more ideal path for the flight of migratory birds.

34. In paragraph 5, why does the author give details about the estimated numbers of birds killed each year?

- To argue that wind farms should not be built along ridge lines
- To point out that the deaths of migratory birds exceed the deaths of birds of prey
- To explain why some environmentalists oppose wind energy
- To suggest that wind turbines result in relatively few bird deaths

Paragraph 5 is marked with an arrow  .

35. The phrase amount to in the passage is closest in meaning to

- can identify
- change
- are reduced by
- total
36. The word *project* in the passage is closest in meaning to

- estimate
- respond
- argue
- plan

37. Which of the following statements most accurately reflects the author’s opinion about wind energy?

- Wind energy production should be limited to large wind farms.
- The advantages of wind energy outweigh the disadvantages.
- The technology to make wind energy safe and efficient will not be ready until the middle of the twenty-first century.
- Wind energy will eventually supply many countries with most of their electricity.

38. Look at the four squares [ ] that indicate where the following sentence could be added to the passage.

Some companies in the power industry are aware of this wider possibility and are planning sizable wind-farm projects in states other than California.

Where would the sentence best fit?

Click on a square [ ] to add the sentence to the passage.

39. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

In the future, wind power is likely to become a major source of the world’s energy supply.

[ ]

[ ]

[ ]
Wind farms have already produced sufficient amounts of electricity to suggest that wind power could become an important source of electric power.

The wind energy produced by just a small number of states could supply all of the power needs of the United States.

Wind power has several advantages, such as low pollution and projected cost declines, compared to other energy sources.

Although wind power is not economical in areas with steady winds, alternative wind sources can be used to simulate wind power.

Responding to environmentalists concerned about birds killed by wind turbines, analysts point to other human developments that are even more dangerous to birds.

Smaller countries, which use less electricity than large countries, are especially suited to use wind power to meet all their energy needs.

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click on View Text.
Listening Section

Listening 1
Narrator
Listen to part of a lecture in a business class.

Professor

OK, uh let's um, let's start. Uh, tonight we're gonna talk about one approach to structuring decision-making on a specific topic, sort of um...oh when you're in a decision-making process in a business situation, and you've got all the participants there sort of voicing opinions and negotiating, and there are lots of different factors to consider in your decision...uh, the technique we're gonna talk about is uh, it's a way to sort of structure that decision and arrive at a better decision. It's called AHP, or Analytic, um, Analytic Hierarchy Process.

Now, the first step is to develop, a hierarchy by breaking the problem down into its components, and then prioritizing the components, as you'll see.

Now there's some AHP software out there that lets you do the math, but I'm not gonna get into that level of detail now. The important thing that I want to talk about is not the mathematics of it so much as the concept.

I, I want you to understand the logic behind Analytic Hierarchy Process and the basic approach.

OK...so uh, let's say, if I was trying to buy a house, a house is actually a pretty good example. It's not a good example for a business class, necessarily, but it'll certainly do for today.

You, you start with your main goal. An' then you break it down into smaller parts. All right...so uh, taking our example of, of buying a house...I would have to determine the goal for the house-hunting effort, uh choose the house that would be uh,...most, well, the best fit for my family. What would be your goal in trying to find a house? Well, uh let's just say, make the best choice in, in buying a new house. Now, now that's the goal.

So now that you’ve established a goal, you establish your criteria. And um, under criteria I would list for me what were the important factors that will influence the decision. And...they would be things like uh, like the cost. And, uh what else? Uh, location. Location, I think, would typically be one in most of our models, and maybe one more. How about floor plan?—The layout of the rooms. So, so we have cost, location, floor plan...those might be our key criteria for choosing a house.

Then you get down to the subcriteria under each of these three criteria. So, so let's say, under floor plan, the subcriteria are, you want a big kitchen, 3 bedrooms, a basement. And after you’ve determined all the criteria and subcriteria, um then you go back and you start making pairwise comparisons between them...uh, judgments about two of these things at a time.

Of the houses you’re considering, uh, is cost more important than location or, say, one has a big kitchen but only two bedrooms. Is that OK?

You move through the hierarchy making judgments about 1 pair of choices at a time. You see, it, it it’s designed to reflect the way people actually think...humans are much more,...capable of making relative rather than absolute judgments. Basically, we’ve reduced a rather complex decision into a series of one-on-one comparisons.

Um, so what AHP does is it requires me to develop a schematic model of what I’m looking for. So, so, right off the bat I have to articulate and think about and identify these factors, these criteria.
And when I start comparing the criteria, these factors, um, it enables me to come up with the relative importance of each factor at a given level in the model. So, in other words, what the model does is it helps us set our priorities, and it forces us to make our priorities explicit. It, it not, not only helps make the best decision, we're also a lot clearer on why we made the decision. And understanding why we made the decision makes it easier to convince the boss or the shareholders that it's a good decision.

1. What is the talk mainly about?
   
   - A comparison of two approaches to decision-making
   - A formula for evaluating business plans
   - A process for improving decision-making
   - A method for gaining consensus within groups

2. In the lecture, the professor describes the steps in AHP. Indicate whether each of the following is a step in the process. Click in the correct box for each phrase.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish the goal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>List alternative courses of action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select key criteria and subcriteria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make pairwise comparisons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise the goal based on choices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Why does the professor mention the floor plan of a house?

   - To give an example of a factor that would influence a decision
   - To give a personal example of a time he found AHP to be useful
   - To show that AHP can be applied to the design of houses
   - To name some criteria that are not important in decision-making

4. According to the professor, what is one important result of using AHP?
• People can make decisions more quickly.
• People are provided with several different outcomes.
• People can take advantage of the latest technology.
• People can better understand the decisions they make.

5. What does the professor mean when he says this:

Professor
Now there's some AHP software out there that lets you do the math, but I'm not gonna get into that level of detail now. The important thing that I want to talk about is not the mathematics of it so much as the concept.

• He wants the students to use the AHP software for an assignment.
• He does not think the AHP software is useful.
• He wants to give only a general explanation of AHP.
• He thinks the students can understand the mathematics without his help.

Narrator
Listen again to part of the lecture. Then answer the question.

Professor
Of the houses you're considering, uh, is cost more important than location or, say, one has a big kitchen but only two bedrooms. Is that OK?

6. Why does the professor say this:

Professor
Is that OK?

• To express uncertainty about the process
• To indicate an example of a decision to be made
• To check the students' understanding of the process
• To find out what the students prefer

Listening 2
Narrator
Listen to part of a conversation between a student and a professor.

Student
Hi, Professor Johnson.

Professor
Hi, Anna. What can I do for you?
Student
[upspeak]
Remember, I e-mailed you about getting the handouts from the class I missed the other day, and you said I could stop by and pick them up today.

Professor
Oh, that’s right. [friendly, but seeking an explanation]
You know, that’s the fourth class you’ve missed this semester, and that’s not doing your grade any good. I assume you had a good reason for being out...

Student
[apologetically]
I know, I really hated to miss another class, but I had the flu, and I could hardly get out of bed. That’ll be the last class I miss, though. I promise.

Professor
[accepting her promise]
Okay...
[sincerely]
So how are you feeling now—are you all recovered?

Student
Well, I’m still not quite a hundred per cent, but I’m feeling much better than I did a few days ago.

Professor
Well, that’s good.
Okay, uh...
[regaining train of thought]
oh yes, the handouts. There were three of them, and I’ll get those for you in just a minute. They’re pretty self-explanatory, but if you have any questions, just send me an e-mail.
But...

Student
[interrupting]
Okay, thank you.

Professor
Sure. Uh, but we also watched a video, and we’ll be having an essay question about it on the next exam, so,
[searching for a solution]
uh... [thinking]
Hmm...Do you have a VCR at home?

Student
Actually, I don’t, but I do have access to one.

Professor
Okay...Well I can lend it you, but the only thing is, you’d have to watch it tonight and get it back to me early tomorrow, because I’m going to be showing it in the other section of that class tomorrow afternoon.

Student
That'd be great.

**Professor**
But you really have to get it back to me tomorrow before my class.

**Student**
No problem. I can drop it off first thing in the morning if you’d like.

**Professor**
Okay...
[changing his mind]
You know what? How about if we do it this way. I’ll keep it for now and show it in my class tomorrow, and uh then you can drop by here and pick it up on Friday morning and keep it for the whole weekend, and just bring it with you when you come to class next week. How does that sound? Uh then you’ll have a couple of days to watch it, and you won’t have to worry about getting it back here tomorrow.

**Student**
[checking her schedule in her mind]
Let’s see, Friday morning...
[turning happy when she realizes she can do it]
Yeah, that’ll work.

**Professor**
Excellent. I’ll be here from about ten to eleven thirty.

**Student**
[leaving]
Great. I’ll see you then.

**Professor**
Uh, just a second. Let me get you those handouts.

**Student**
[leaving]
Great. I’ll see you then.

**Narrator**
Now get ready to answer the questions. You may use your notes to help you answer.

7. Why does the woman go to see her professor?

- To get materials for a class she missed
- To discuss an assignment she is working on
- To ask a question about a video her class recently watched
- To inform the professor of changes in her schedule

8. Why does the professor change his mind about when he will lend the woman the video?

- He remembers that he does not have the video in his office.
- He realizes that the woman does not have a VCR.
• He is worried that he will not have the video back in time for his class.
• He realizes that he will not need the video until the following week.

9. Why will the woman stop by the professor's office on Friday morning?
• To return the video to the professor
• To get the video from the professor
• To hand in an assignment to the professor
• To discuss the handouts with the professor

Narrator
Listen again to part of the conversation. Then answer the question.

Professor
You know, that's the fourth class you've missed this semester, and that's not doing your grade any good. I assume you had a good reason for being out...

10. Why does the professor say this:

Professor
I assume you had a good reason for being out...

• To indicate that he is not concerned about the woman's absence
• To assure the woman that her absence will not affect her grade
• To indicate that he has finished discussing the woman's absence
• To encourage the woman to explain why she was absent

Narrator
Listen again to part of the conversation. Then answer the question.

Professor
Okay, uh... [regaining train of thought]
oh yes, the handouts. There were three of them, and I'll get those for you in just a minute. They're pretty self-explanatory, but if you have any questions, just send me an e-mail.

11. What can be inferred about the professor?

• He is not planning to talk about the handouts now.
• He expects the woman to respond to questions in the handouts.
• He is concerned that the handouts may be difficult to understand.
• He is not sure if he has the handouts the woman needs.
Narrator
Listen to part of a talk in a history class.

Professor
Okay, uh, so last time we were talking about the expansion of the railroad in the nineteenth century—why it was so important in the development of the southwestern United States. Uh, we talked about a couple of things: the railroad brought about land speculation, and development of lands for timber and farming and—well, and this is what I want to talk about today—the railroads brought tourists. They traveled by train, viewing the landscape, and uh, came to get a taste of what the "Wild West" was like. In the past 100 years, a whole tourism industry has grown up around this idea. And uh, just like…ranching, or gold mining, it helped to integrate the Southwest into the economy of the rest of the country…uh, tourism helped integrate the "culture" or life in the Southwest into…well, well kind of into the minds of the rest of the country. And large-scale tourism couldn't have happened without the expansion of the railroad.

So, the railroad brought tourists, and tourists brought some changes that I think are really interesting. Uh, the thing about tourism that you should know first, and this has been determined by sociologists…sociologists say that tourists look for the familiar. Most tourists don't go someplace looking for new things. They go looking for things they already know something about. Tourists will have some sense of the culture of a place—maybe based on a stereotype or a generalization—but but that's what they expect to see. And places that—deal with tourism, create things knowing this—they create what tourists are looking for. Take the Grand Canyon Railway…any of you been on it? Well, this is a train that takes tourists to the Grand Canyon, and while you're on the train, you see fake shootouts and gunfights. Now, the railroad running to the Grand Canyon was never actually robbed. But tourists have this idea that this was what things were like in the "Wild West," you know, gunfights and train robberies, and the tourist railway wants to make them happy. There's a great term for this…it's called staged authenticity.

In other words, people go to the Grand Canyon to see this fantastic natural landscape but they also want to get a sense of what it was like there during the real "Wild West." Well, the railway knows this, so they try to re-create some of that cultural history. And, oh, and we also see this at the Grand Canyon with the creation of Hopi House. Have any of you visited Hopi House?

Student A
I went there last year.

Professor
Could you tell the class what it was like?

Student A
Yeah…it's kind of a, a big gift shop…where they sell traditional crafts—jewelry, pottery… stuff like that. And supposedly it's really made by Hopi people, the people who live there.

Professor
Anything else? What about the architecture?

Student A
Oh, right. It's an unusual building…it's supposed to look like a real Hopi building, I think.

Professor
Good, I noticed the same things. Now I'm not saying Hopi House is a fraud—the stuff they sell really is made by Hopi artists—but it's still an example of staged authenticity. Something I bet you didn't know…the Hopis never actually lived in, or even near, the Grand Canyon. There was another Native American people who lived in the Canyon, known as the Havasupi [hah-va-SOOP-ee]. But the tourist company that ran the place—it was called the Harvey Company—decided to hire the Hopi instead of the Havasupi. Can anyone guess why?

Student B
Were the Hopi better artists? I mean, did they make better things?
**Professor**
Not really. The way I understand it, the people at the Harvey Company were very good at making money, and they figured that the Hopi people and the Hopi crafts would sell better to the tourists. So they built Hopi House, and hired the Hopi people to work there and uh, one of those people, uh, a famous Hopi potter, was hired by the Harvey Company and she worked to rebuild, or or kind of restructure, the Hopi pottery. It’s not sure whether this was her own doing or whether she was instructed to do this but… archaeologists working at ancient sites in the Southwest uncovered pottery and she started copying the same style.
And, well there’s some debate about that/…whether it was her idea or whether she was told to do it. Either way, before you know it Hopi pottery was changing. It’s, it’s another case of the contradictions of staged authenticity—certainly the Hopi pottery you buy there is real. I mean, it does represent the pottery of the Southwest. But the Hopi people are not the traditional inhabitants of the Canyon, and their art gets affected by the tourist market—the the Harvey Company basically changed history to make money.

**Narrator**
Now get ready to answer the questions. You may use your notes to help you answer.

12. What is the talk mainly about?

- The differences between the traditions of the Hopi and Havasupi people
- The relationship between tourism and Southwestern cultural history
- The impact of Native American crafts on Grand Canyon tourism
- How tourism in the Southwest has changed in the past 100 years

13. Why does the professor mention the expansion of the railroad in the nineteenth century?

- To emphasize the importance of the railroad to the development of farming in the Southwest
- To explain the increased mobility of Native American peoples
- To provide background for a discussion of Southwestern tourism
- To give an example of the dangers tourists faced in the Southwest

14. What does the professor say about the Grand Canyon Railway?

- It is the only way to travel to the Grand Canyon.
- It provides entertainment for passengers.
- Its passengers often consider it to be too slow.
- It is owned and operated by the Hopi people.

15. According to the professor, what does Hopi House demonstrate?

- Two Native American groups share control of the Grand Canyon tourist industry.
- The history portrayed by the tourist industry is not always accurate.
- Native American art and culture have not been influenced by tourism.
- The Grand Canyon Railway has benefited many Native American groups.

16. What does the professor say about the pottery now sold at Hopi House?

- It is made in another country and imported to the United States.
- It is less expensive than pottery sold elsewhere in the area.
- It is produced by the traditional inhabitants of the Grand Canyon.
- Its style has been influenced by ancient pottery found in the Southwest.
Narrator
Listen again to part of the lecture. Then answer the question.

Professor
archaeologists working at ancient sites in the Southwest uncovered pottery and she started copying the same style. And, well there's some debate about that/…whether it was her idea or whether she was told to do it.

17. Why does the professor say this:
Professor
“And, well there’s some debate about that”

- To express uncertainty about the facts
- To criticize the company’s decision
- To explain that the story is not true
- To encourage students to express their opinions
Listening 4

Narrator
Listen to part of a lecture in a biology class.

Professor
So today we’re gonna talk about song development in birds and how—you may be surprised to know—the songs of most songbird species are learned—not completely instinctual—which is what we used to think...so I’d like to start things off today by, um, centering our discussion on the chaffinch.

The chaffinch is a type of European songbird, and we’re gonna use the chaffinch’s song development as illustrative of songbirds’ song development in general, because many other songbirds follow this same pattern, this pattern of learning songs.

Okay, so soon after hatching, baby chaffinches start producing these, um, begging sounds, begging calls, actually, which basically are a message to the parents saying, “Feed me; feed me.” That’s all for about the first five weeks, until they grow feathers and start getting ready to fly, you know, become fledglings, and then those calls—those begging sounds—are replaced by, uh, well...you know how babies—human babies—you know how they make that...baby...babbling sound? Like little, soft, vocalized...murmurings? Well, that’s pretty much similar to the noises that fledgling chaffinches make at this next stage of development...which is called subsong...

“Subsong” makes sense, right, because “sub” means “below,” and so the subsong is...uh, below, or...happens before their mature song, right? It’s an immature, or underdeveloped song, a baby song. Make sense?

Okay, now, they’re not begging for food anymore with the subsong. So what do you figure they’re making these soft murmurings for? Well, it’s at this stage—what we call early subsong—that, and this is important, the chaffinch’s subsong begins to provide auditory feedback from which the chaffinch learns, and so...self-learning is taking place, because the fledgling hears itself calling out, hears the sounds it’s making, you know, hears, hears its subsong, and so, it’s kinda’ comparing it to the parent’s song and so self-learning is taking place, um, through this process...get it?...

Alright. Now, as the chaffinch gets a little older, it enters into what could be called late subsong where parts of its subsong start sounding more and more like its parent’s song, and we have the next step in song development taking place in late subsong, that is, the introduction of plastic song within the subsong—plastic song referring to—I don’t have to write that on the board, do I?—referring to the parts of the subsong that sound like the parent’s song.

Plastic song. Does that sound a little strange to you? Well, keep in mind that “plastic” has, um, formative implications, you know, it can mean, like, growth, or development into something...like what the chaffinch’s song is doing...it’s developing into its parent’s song...it’s, uh, not quite fully realized yet—it doesn’t sound precisely like its parent’s song—remember this is still the subsong stage we’re talking about—but it’s on its way, the fledgling is still learning, imitating parts of its parent’s song, just not quite the whole thing yet.

So. The fledgling gets older and now it’s winter, and during the winter, the young chaffinch doesn’t practice its singing. But in the spring, the chaffinch starts back up again, singing and practicing, and this time there is more of an emergence of plastic song, ah...a stronger presence of it within the subsong, and so thereby, the parent’s song is growing increasingly more recognizable and distinct, follow? Then, after about a month, the young chaffinch’s song crystallizes into what’s called full song—the, um, exact song the adults sing. So full song’s, uh, a full-blown imitation of the adult song. Alright?

Now what’s interesting is that chaffinches are able to complete this process, even from only a short exposure to their parents’ song. Exposure during the first few weeks of life is really all they need, and after that they can remember it, even though they need quite a bit of practice to produce it accurately themselves. So the theory is that there is a sensitive period in the chaffinch’s early life, its early development, a special sensitive period during which it learns what its song should sound like. So chaffinches, um, along with many other birds, learn songs early in life, and when they become adults, they don’t change their songs—it’s a copy of the parents’ song, like we said, okay?

Narrator
Now get ready to answer the questions. You may use your notes to help you answer.

18. What aspect of a chaffinch’s song does the professor mainly discuss?
• How it is used to beg for food
• How it has changed over several generations
• How its development differs from that of other songbirds
• How it develops from an early age

19. What does the professor say about plastic song?

• It imitates only parts of the parent’s song.
• It is identical to subsong.
• It is instinctual and does not need to be learned.
• It represents the final stage in a chaffinch’s song development.

20. What is the evidence for chaffinches’ having a sensitive period for song learning?

• They begin to practice their song in the spring.
• They do not develop full song until their second year.
• They need little exposure to adult song in order to learn it.
• They do not make many sounds for the first five weeks of their lives.

Narrator
Listen again to part of the lecture. Then answer the question.

Professor
--and we have the next step in song development taking place in late subsong, that is, the introduction of plastic song within the subsong--
plastic song
referring to--I don't have to write that on the board, do I?

21. What does the professor imply when she says this:

Professor
I don't have to write that on the board, do I?

• The words in the term are probably familiar to the students.
• The term is not important to the lecture.
• The students should have studied the term already.
• The students should have written the term down already.
22. Why does the professor say this:

Professor
Does that sound a little strange to you? Well, keep in mind that “plastic” has, um, formative implications, you know, it can mean, like, growth, or development into something

- To correct something she said earlier
- To explain a term she just introduced
- To explain what is wrong with a particular theory
- To remind the students of something discussed earlier

23. How does the professor introduce her description of the sounds a chaffinch makes during subsong?

- She contrasts the subsong of a chaffinch with the subsongs of other songbird species.
- She compares the sounds a chaffinch makes to those a human baby makes.
- She describes the sound of an adult chaffinch’s full song.
- She reminds the class how scientists define begging calls.

Listening 5

Narrator
Listen to part of a discussion in an astronomy class. The professor is discussing Pluto.

Professor
Well, today I thought we’d talk about some of the reasons why Pluto’s status as a planet has been debated. You see, until recently what makes a planet a planet was one of the simpler concepts in astronomy. It’s always been deemed so, uh…so obvious, so… basic that it was never officially defined…So anyway,…uh improvements in telescopes and related technology have led to a whole host of discoveries in our solar system…with one result being that now even the generally accepted idea of what a planet is is being challenged…or at least qualified. And this directly affects the status of Pluto.

Student A
So what makes Pluto so different that it could be, um…reclassified?

Professor
Well, actually, there are several important differences between Pluto and the other planets. First, when you look at the other planets, especially the planets in the outer solar system, where Pluto orbits, you see that Pluto stands out, it’s the oddball…and I’ll give you one guess why.
**Student B**
It’s gotta be the size…Jupiter, Saturn and uh, Uranus and Neptune,…they’re the gas giants, and, well, Pluto isn’t.

**Professor**
Exactly,…uh compared to the gas giants, Pluto’s very different,…it’s neither gaseous nor a giant. See, uh Pluto is less than half the size of the next smallest planet, Mercury. It’s even smaller than our moon…and smaller than other moons in our solar system. So Pluto is very small for a planet,…maybe it’s not large enough to be considered a planet.

**Student A**
But Pluto orbits the Sun and…I mean…well, that’s one of the things planets do.

**Professor**
You’re right…Most people agree that a planet orbits a sun, and Pluto certainly does that…every 248 years, but with a highly eccentric orbit. Take a look at this:

What I mean when I say ‘eccentric’ is…it’s not like the other planets’ orbits, instead it’s different in uh, two major ways. One, it’s elliptical, but the others are nearly circular. So for part of its orbit, Pluto is closer to the Sun than Neptune and for the rest it’s farther away. And two, Pluto orbits on a different plane. That is, all the planets orbit the Sun on the same plane, except Pluto…which orbits at a seventeen degree angle to the other orbits. Do you see where it looks like it crosses the other orbits?

**Student A**
[interrupting] But I don’t see why being small and having an unusual orbit would change Pluto’s status. I mean it still has most of the features that the other planets have, doesn’t it? It’s got an atmosphere, granted it’s thin, but it’s there. It even has a moon!

**Professor**
That’s true. In fact, if it wasn’t for the discovery of the Kuiper belt rhymes with “piper”, there probably wouldn’t be a question about Pluto’s status.…

[questioning sounds by the students]

**Student B**
It’s…I’m sorry, the what belt?

**Professor**
Uh, it’s the Kuiper belt. It’s like a swarm of icy-rocky objects out beyond Neptune. It turns out that Kuiper belt objects, which are also called KBOs, have a lot in common with Pluto. For one, KBOs and Pluto are made of the same stuff, namely rock and ice. And for most of its orbit, Pluto is in the Kuiper belt. Remember when I said that Pluto has an eccentric orbit? Well, many KBOs do, too,…for the same reason,…their orbits are influenced by Neptune’s gravity. Now, without going into too much detail,…let me just say that Neptune’s gravity sort of pulls Pluto and the KBOs around…this results in orbits that are elliptical and almost exactly one and one half times longer than Neptune’s.

In light of these similarities, some suggest that Pluto’s merely the largest KBO found to date. Now, I’m saying this because several other large Kuiper belt objects have been found, some half as large as Pluto. Some scientists believe that they might find other KBOs as large as Pluto…

**Student B**
So you’re saying that Pluto’s more like a KBO than a planet?

**Student A**

Yeah…I mean, considering everything you just said, um, if Pluto were discovered today, would it even…well….would it even be called a planet?

**Professor**

Well, let’s see. You tell me.

**Student A**

Hmmm, well… I’d still call it a planet. Like I said before…it may be small, but it’s got an atmosphere and a moon, it orbits the Sun and...

**Student B**

[interrupting] Come on…it, it’s obviously a KBO. I mean, it’s in the Kuiper belt, it’s made of the same materials, it orbits the same way and it’s way smaller than any other planet. I think it’s clear

**Professor**

Well, nobody knew about the Kuiper belt when Pluto was discovered, so they called it a planet. But now? I think its status will continue to be questioned until there’s an official definition for planet.

24. What is the discussion mainly about?

- Why most planets are larger than Pluto
- The reasons some objects may soon be considered planets
- How Pluto challenges the conventional idea of a planet
- The discovery of Kuiper belt objects

25. How does the professor emphasize his point about Pluto’s size?

- By stating the dimensions of nearby planets
- By explaining the relationship between Pluto’s size and its orbit
- By identifying the reasons why Pluto was originally misclassified
- By comparing Pluto to other planets and objects in the solar system

26. What are two key features of Pluto’s orbit mentioned in the discussion?

Click on 2 answers.

- Pluto’s orbit is influenced by Neptune’s gravity.
- Pluto’s orbit is nearly circular.
- Pluto’s orbit is at an angle to the other planets’ orbits.
- Pluto’s orbit passes nearer to the Sun than most of the other planets.

27. According to the discussion, what are some reasons for NOT classifying Pluto as a planet?

Click on 3 answers.

- It has an atmosphere.
It is located in the Kuiper belt.
- It is composed of rock and ice.
- It is located too far from the Sun.
- It is much smaller than the other planets.

**Narrator**
Listen again to part of the lecture. Then answer the question.

**Professor**
...When you look at the other planets, especially the planets in the outer solar system, where Pluto orbits, you see that Pluto stands out, it's the oddball...and I'll give you one guess why.

28. What does the professor mean when he says this:

**Professor**
"I'll give you one guess why."

- He thinks the question is difficult to answer.
- He thinks the reason is obvious.
- He does not expect a reply.
- He does not want many people to reply.

**Narrator**
Listen again to part of the lecture. Then answer the question.

**Student A**
Hmmm, well...I'd still call it a planet. Like I said before...it may be small, but it's got an atmosphere and a moon, it orbits the Sun and...

**Student B**
Come on...it, it's obviously a KBO. I mean, it's in the Kuiper belt, it's made of the same materials, it orbits the same way and it's way smaller than any other planet. I think it's clear.

29. What can be inferred about the students?

- They both disagree with the professor’s conclusion.
- The woman has not yet reached a conclusion about Pluto.
- The man easily convinced the woman to change her mind.
- They have come to different conclusions about Pluto.
Listening 6

Narrator
Listen to part of a conversation in a library.

Librarian
Hi. Can I help you?
Student
Yeah, I’m looking for a reference book.
Librarian
OK. Do you know the title?
Student
Well, that’s the thing. I’m not exactly sure what I’m looking for. I need uh, information on European demographics.
Librarian
OK, do you just need population statistics, like, total population, male-female…real basics for demographics?
Student
Yeah. Population, literacy rate, uh, let’s see…life expectancy by gender, like if women tend to live longer than men…things like that.
Librarian
OK, well, I—I’m pretty sure you can get most—if not all—of those statistics from an atlas. I can tell you where to find one in the reference section.

Student
Yeah, but I’m kind of looking for it by city, not by country and the atlas I saw…
Librarian
[understanding the problem]
Uh huh…I see…
Student
Well, do you know if there are any other reference books I can use for this? To find the statistics by city?
Librarian
[stumped, but trying to think of something]
City, you say.
Any particular part of Europe? Eastern, western…southern?
Student
No. Pretty much all across Europe.
Librarian
[Unsure she will be able to help]
All of Europe. Hmmm.
Y-you know, maybe you could tell me what this is for, I mean, maybe if-if I know, I can help you better.
Student
Yeah, OK. Geography with Professor Miller and it’s sort of an analysis of, uh, urban areas, a comparison of population trends and uh economic indicators, social indicators, I guess…
Librarian
[running out of ideas]
OK, well, there’s something called the Demographic Yearbook, but it’s—but I don’t think it’s gonna do it by city.
Student
Yeah, I think that’s just by country.
Librarian
You’ve already looked at it? I think, I-I think you’re right, but I’m just gonna check it first, ’cause it would be easy if it were there.

[looking through the book]
Yeah. Population. By country…OK let’s see. Did you, I mean, did your professor give you any ideas on where to look? I mean, because, if you need the demographic information by city…
Student
No, she-she didn’t. She just gave us the assignment and I figured I could find what I needed here without too much of a problem.
**Librarian**
Yeah, it should be easier than this. I mean, I know there's one for North American cities, but I don't think that'll be a big help.

**Student**
Nah.

**Librarian**
Tell you what. Let's go over to the reference section. Let's take a look around that area and see if anything looks promising.

**Narrator**
Now get ready to answer the questions. You may use your notes to help you answer.

30. What does the man need from the library?

- A research study written by his professor
- Demographic information about people living in Europe
- Information on research methods in demographics
- A specific geography reference book

31. What does the man imply about the atlas he looked at?

- It does not list population statistics by city.
- It does not list population statistics by country.
- It contains information about Europe that is out of date.
- It lacks information on southern Europe.

32. What is an example the man gives of the kind of information he needs about European cities?

- Their climate
- Their geographic size
- How long people live
- What languages people speak

33. Where will the man and woman look for the information the man needs?

- In a different library
- In Professor Miller's office
- In the geography department
- In the reference section of the library

**Narrator**
Listen again to part of the conversation. Then answer the question.

**Librarian**
Any particular part of Europe? Eastern, western…southern?

**Student**
No. Pretty much all across Europe.

**Librarian**
[Unsure she will be able to help]
All of Europe. Hmmm.

34. What does the woman mean when she says this:

**Narrator**
What does the woman mean when she says this:

**Librarian**
[Unsure she will be able to help]
All of Europe. Hmmm.

- She knows which book the man needs.
- She is too busy to find the information for the man.
- She is not sure she has heard the man correctly.
- She is not sure she can find the information the man needs.

**Adjusting the Microphone**

*Microphone check, delivered before Speaking section directions*

In order to adjust your microphone volume, please answer the practice question below, using your normal voice tone and volume. The microphone volume will be automatically adjusted as you speak.

Begin speaking after the beep. Continue speaking until a message appears.

"Describe the city you live in."
Speaking Section

Speaking 1

Narrator
Describe a class you have taken in school and explain why the class was important to you. Include details and examples to support your explanation.

Please begin speaking after the beep.

[2 secs beep]

[Appearing on screen]

1. Describe a class you have taken in school and explain why the class was important to you. Include details and examples to support your explanation.

Preparation time: 15 seconds
Response time: 45 seconds
Announcement from the president

The university has decided to increase tuition and fees for all students by approximately 8 percent next semester. For the past 5 years, the tuition and fees have remained the same, but it is necessary to increase them now for several reasons. The university has many more students than we had five years ago, and we must hire additional professors to teach these students. We have also made a new commitment to research and technology, and will be renovating and upgrading our laboratory facilities to better meet our students’ needs.
Student A
Yeah, I guess you’re right. You know, in some classes I can’t even get a seat. And I couldn’t take the math course I wanted to because it was already full when I signed up.

Student B
And the other thing is, well, I am kind of worried about not being able to get a job after I graduate.

Student A
Why? I mean you’re doing really well in your classes, aren’t you?

Student B
I’m doing ok, but the facilities here are so limited. There are some great new experiments in microbiology that we can’t even do here... there isn’t enough equipment in the laboratories, and the equipment they have is out of date. How am I going to compete for jobs with people who have practical research experience? I think the extra tuition will be a good investment.

[2 seconds]

Narrator
The woman expresses her opinion of the announcement made by the university president. State her opinion and explain the reasons she gives for holding that opinion.

Please begin speaking after the beep.
[2 secs beep]

[Appearing on screen]

2. The woman expresses her opinion of the announcement made by the university president. State her opinion and explain the reasons she gives for holding that opinion.

   Preparation time:  30 seconds
   Response time:     60 seconds
Animal Domestication

For thousands of years, humans have been able to domesticate, or tame, many large mammals that in the wild live together in herds. Once tamed, these mammals are used for agricultural work and transportation. Yet some herd mammals are not easily domesticated.

A good indicator of an animal’s suitability for domestication is how protective the animal is of its territory. Non-territorial animals are more easily domesticated than territorial animals because they can live close together with animals from other herds. A second indicator is that animals with a hierarchical social structure, in which herd members follow a leader, are easy to domesticate, since a human can function as the “leader”.

The professor describes the behavior of horses and antelope in herds. Explain how their behavior is related to their suitability for domestication.
<table>
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<th>Description</th>
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<tr>
<td>Preparation time</td>
<td>30 seconds</td>
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<tr>
<td>Response time</td>
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Speaking 4

Narrator
Please Listen Carefully

Narrator
You may begin to prepare your response after the beep.
[2 secs beep]

Narrator
Now listen to a conversation between two students.

Student A
Hey Lisa, how’s it going?

Student B
Hi Mark. Uh, I’m OK, I guess, but my schoolwork is really stressing me out.

Student A
[sympathetically]
Yeah? What’s wrong?

Student B
Well, I’ve got a paper to write, and two exams to study for. And a bunch of math problems to finish. It’s just so much that I can’t concentrate on any of it. I start concentrating on studying for one of my exams, and then I’m like, how long’s it gonna take to finish that problem set?

Student A
Wow sounds like you’ve got a lot more work than you can handle right now. [Not wanting to sound too pushy] Look have you talked to some of your professors...I mean, you know , try to explain the problem. Look, you could probably get an extension on your paper, or on the math assignment...
Student B
You think? It would give me a little more time to prepare for my exams right now.

Student A
Well, I mean another thing that you might do ... I mean have you tried making yourself a schedule? I mean that’s what I do when I’m feeling overwhelmed.

Student B
What does that do for you?

Student A
Well, I mean it helps you to focus your energies. You know, you make yourself a chart that shows the next few days and the time till your stuff is due and...

Student B
Uh-huh [meaning “I’m listening”]

Student A
I mean think about what you need to do, and when you have to do it by. You know then start filling in your schedule—like, all right 9:00 [nine] to 11:30 [eleven-thirty] A.M., study for exam. 12:00 [twelve] to 3:00 [three], work on problem set. But I mean don’t make the time periods too long. Like, don’t put in eight hours of studying—you know, you’ll get tired, or start worrying about your other work again. But if you keep to your schedule, you know you’ll just have to worry about one thing at a time.

Student B
Yeah, that might work. [somewhat noncommittally]

Narrator
The students discuss two possible solutions to the woman’s problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Please begin speaking after the beep.
[2 secs beep]

[Appearing on screen]

4. The students discuss two possible solutions to the woman’s problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Preparation time: 20 seconds
Response time: 60 seconds
Altruism is a type of behavior in which an animal sacrifices its own interest for that of another animal or group of animals. Altruism is the opposite of selfishness; individuals performing altruistic acts gain nothing for themselves.

Examples of altruism abound, both among humans and among other mammals. Unselfish acts among humans range from the sharing of food with strangers to the donation of body organs to family members, and even to strangers. Such acts are altruistic in that they benefit another, yet provide little reward to the one performing the act.

In fact, many species of animals appear willing to sacrifice food, or even their life, to assist other members of their group. The meerkat, which is a mammal that dwells in burrows in grassland areas of Africa, is often cited as an example. In groups of meerkats, an individual acts as a sentinel, standing guard and looking out for predators while the others hunt for food or eat food they have obtained. If the sentinel meerkat sees a predator such as a hawk approaching the group, it gives an alarm cry alerting the other meerkats to run and seek shelter. By standing guard, the sentinel meerkat gains nothing—it goes without food while the others eat, and it places itself in grave danger. After it issues an alarm it has to flee alone, which might make it more at risk to a predator, since animals in groups are often able to work together to fend off a predator. So the altruistic sentinel behavior helps ensure the survival of other members of the meerkat's group.

Narrator
Now listen to part of a lecture on the topic you just read about.

Professor
You know, often in science, new findings force us to re-examine earlier beliefs and assumptions. And a recent study of meerkats is having exactly this effect. The study examined the meerkat’s behavior quite closely, much more closely than had ever been done before. And some interesting things were found...like about eating habits...it showed that typically meerkats eat before they stand guard -- so the ones standing guard had a full stomach! And the study also found that since the sentinel is the first to see a predator coming, it’s the most likely to escape...because it often stands guard near a burrow, so it can run immediately into the burrow after giving the alarm. The other meerkats, the ones scattered about looking for food, are actually in greater danger.

And in fact, other studies have suggested that when an animal creates an alarm, the alarm call might cause the other group members either to gather together or else to move about very quickly, behaviors that might actually draw the predator’s attention away from the caller, increasing that animal’s own chances of survival.
And what about people--what about some human acts that might be considered altruistic? Let's take an extreme case, uh, suppose a person donates a kidney to a relative, or even to a complete stranger. A selfless act, right? But doesn't the donor receive appreciation and approval from the stranger and from society? Doesn't the donor gain an increased sense of self worth? Couldn't such non-material rewards be considered very valuable to some people?

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**Question:**
Summarize the points made in the lecture you just heard, explaining how they cast doubt on points made in the reading.

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Writing 2

Directions:
Read the question below. You have 30 minutes to plan, write, and revise your essay. Typically, an effective response will contain a minimum of 300 words.

Question:
Do you agree or disagree with the following statement?

**Good teachers are more important to a child's development than good parents.**

Use specific reasons and examples to support your answer.