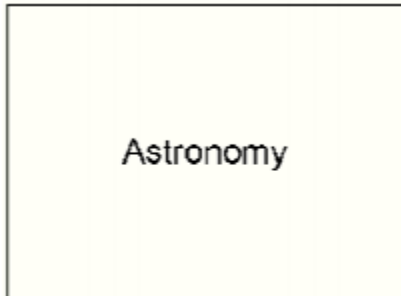


## SET 1



### **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.

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

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.

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

**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:

*[This text will only be heard.]*

**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.

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

**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.

**SET 2**

**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. Hmm.

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.

Now get ready to answer the questions.

You may use your notes  
to help you answer.

**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.

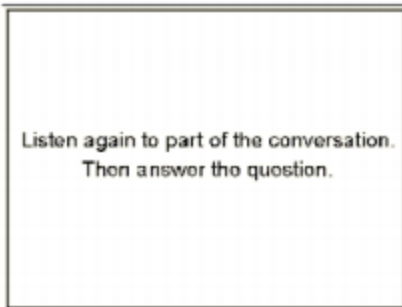
32. What is an example the man gives of the kind of information he needs about European cities?

- 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:

*[This text will only be heard.]*

**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.