STUDENT: What does LGM stands for? TEACHER: → Last Glacial Maximum STUDENT: What did the analysis from the sediment deposits indicate? TEACHER:  $\hookrightarrow$  rainfall in the basin during the LGM was lower than for the present STUDENT: What are some of scientists arguments? TEACHER: 

→ the rainforest was reduced to small, isolated refugia separated by open forest and grassland STUDENT: How has this debate been proven? TEACHER: → This debate has proved difficult STUDENT: How are the explanations supported? TEACHER: → explanations are reasonably well supported STUDENT: There have been major changes in Amazon rainforest vegetation over the last how many years? TEACHER:  $\hookrightarrow$  21,000 STUDENT: What caused changes in the Amazon rainforest vegetation? TEACHER:  $\hookrightarrow$  the Last Glacial Maximum (LGM) and subsequent deglaciation STUDENT: What has been analyzed to compare Amazon rainfall in the past and present? TEACHER:  $\hookrightarrow$  sediment deposits

## Section: Amazon rainforest3

Context: There is evidence that there have been significant changes in Amazon rainforest vegetation over the last 21,000 years through the Last Glacial Maximum (LGM) and subsequent deglaciation. Analyses of sediment deposits from Amazon basin paleolakes and from the Amazon Fan indicate that rainfall in the basin during the LGM was lower than for the present, and this was almost certainly associated with reduced moist tropical vegetation cover in the basin. There is debate, however, over how extensive this reduction was. Some scientists argue that the rainforest was reduced to small, isolated refugia separated by open forest and grassland; other scientists argue that the rainforest remained largely intact but extended less far to the north, south, and east than is seen today. This debate has proved difficult to resolve because the practical limitations of working in the rainforest mean that data sampling is biased away from the center of the Amazon basin, and both explanations are reasonably well supported by the available data. CANNOTANSWER

STUDENT: What has the lower rainfall in the Amazon during the LGM been attributed to?

TEACHER: → reduced moist tropical vegetation cover in the basin

STUDENT: Many changes in the vegetation of the amazon rainforest took place since the Last Glacial Maximum, which was how many years ago?

TEACHER:  $\hookrightarrow$  21,000

STUDENT: Analysis of what kind of deposits from the Amazon Fan indicates a change in rainfall in the Amazon basin?

TEACHER:  $\hookrightarrow$  sediment deposits

STUDENT: Changes in rainfall reduced what kind of vegetation cover in the Amazon basin?

TEACHER: → moist tropical vegetation cover

STUDENT: Scientists disagree with how the Amazon rainforest changed over time with some arguing that it was reduced to isolated refugia seperated by what?

TEACHER:  $\hookrightarrow$  open forest and grassland

STUDENT: Why is it difficult to resolve disagreements about the changes in the Amazon rainforest?

TEACHER:  $\hookrightarrow$  data sampling is biased away from the center of the Amazon basin

STUDENT: There have been insignificant changes in the Amazon rain forest vegetation through the last what

TEACHER: → CANNOTANSWER

STUDENT: What was higher during the LGM than the present?

TEACHER: → CANNOTANSWER

STUDENT: What has been easily proven about the rain forest

TEACHER: → CANNOTANSWER

STUDENT: Data sampling strongly supports that what remained largely intact??

TEACHER: → CANNOTANSWER