

Name _____

Date 9-29-10

Diagnostic Questions: Conversation about the Sun and Moon

Why does it get dark at night?

It gets dark because as the earth spins on its axis, part of the earth faces the sun and the other part faces away from it.

Why is it cold in the winter and hot in the summer?

The earth rotates around the sun, so when certain areas receive the most direct sunlight, it is summer. Consequently, when areas receive the least direct sunlight, it is winter.

Why does the moon seem to have different shapes at different times?

The earth shadows the moon from the sun.

Name _____

Date 9-29-11

How would you define a "scientific explanation"?

A scientific explanation is one that includes observations from an experiment.

How would you define "inquiry approaches to learning and teaching"?

Inquiry approaches are ones in which students ask questions and teachers shape lessons to fit students' interests in order to make lessons meaningful.

Name _____

Date 11-17-11

Diagnostic Questions: Conversation about the Sun and Moon

Why does it get dark at night?

It gets dark at night because the earth rotates on its axis in a 24-hour period.

Why is it cold in the winter and hot in the summer?

It is cold in the winter because, due to the earth's rotation and its revolutions around the sun, the portion of earth experiencing winter is receiving less direct sunlight.

Why does the moon seem to have different shapes at different times?

The moon appears to have different shapes because it is revolving around the earth, receiving sunlight in only certain portions. (Light travels in straight lines → the illuminated portion is from our perspective).

Name _____

Date _____

How would you define a "scientific explanation"?

A scientific explanation is one that can be supported by experiments and evidence.

How would you define "inquiry approaches to learning and teaching"?

An inquiry approach is one that allows natural curiosity to shape a lesson.